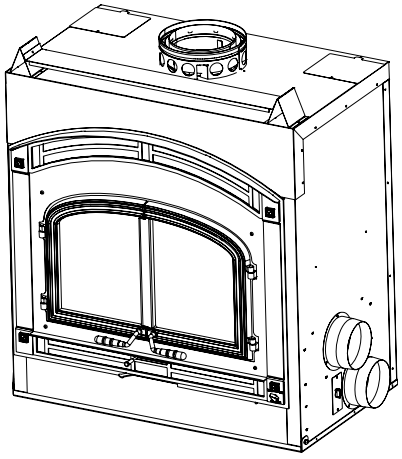
QUADRA-FIRE®

7100FP
EPA CERTIFIED WOODBURNING FIREPLACE

Owner's Manual
Installation and Operation

Model:
7100FP-BK-B
7100FP-GD-B
7100FP-NL-B



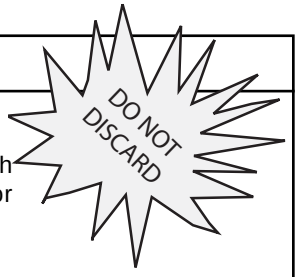
LIMITED LIFETIME QUADRA-FIRE WARRANTY

Tested and Listed by O-T-L Beaverton Oregon USA
C US
OMNI-Test Laboratories, Inc.

CAUTION

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



⚠ WARNING

If the information in these instructions is not followed exactly, a fire may result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not overfire - If heater or chimney connector glows, you are overfiring. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

⚠ WARNING

HOT! DO NOT TOUCH.
SEVERE BURNS MAY RESULT.
CLOTHING IGNITION MAY RESULT.

Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers removed or door open.
- Keep clothing, furniture, draperies and other combustibles away.

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends NFI certified professionals, or technicians supervised by an NFI certified professional.

Wood Energy Technical Training www.wetinc.ca

⚠ WARNING

Fire Risk.

For use with solid wood fuel only.
Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).

Congratulations

and Welcome to the Quadra-Fire Family!

Hearth & Home Technologies welcomes you to our tradition of excellence! In choosing a Quadra-Fire appliance, you have our assurance of commitment to quality, durability, and performance.

This commitment begins with our research of the market, including 'Voice of the Customer' contacts, ensuring we make products that will satisfy your needs. Our Research and Development facility then employs the world's most advanced technology to achieve the optimum operation of our stoves, inserts and fireplaces. And yet we are old-fashioned when it comes to craftsmanship. Each unit is meticulously fabricated and gold and nickel surfaces are hand-finished for lasting beauty and enjoyment. Our pledge to quality is completed as each model undergoes a quality control inspection. From design, to fabrication, to shipping: Our guarantee of quality is more than a word, it's Quadra-Fire tradition, and we proudly back this tradition with a Limited Lifetime Warranty.

We wish you and your family many years of enjoyment in the warmth and comfort of your hearth appliance. Thank you for choosing Quadra-Fire.

With warm regards,

Alan Trusler
Vice President
Dealer Channel

Dan Henry
Vice President
Advanced Technolgies

Jason Olmstead
Vice President &
General Manager

Steve Tate
Quadra-Fire
Brand Manager

SAMPLE: CLEARANCE TO COMBUSTIBLES LABEL

LOCATION: on hang tag on right side of fireplace

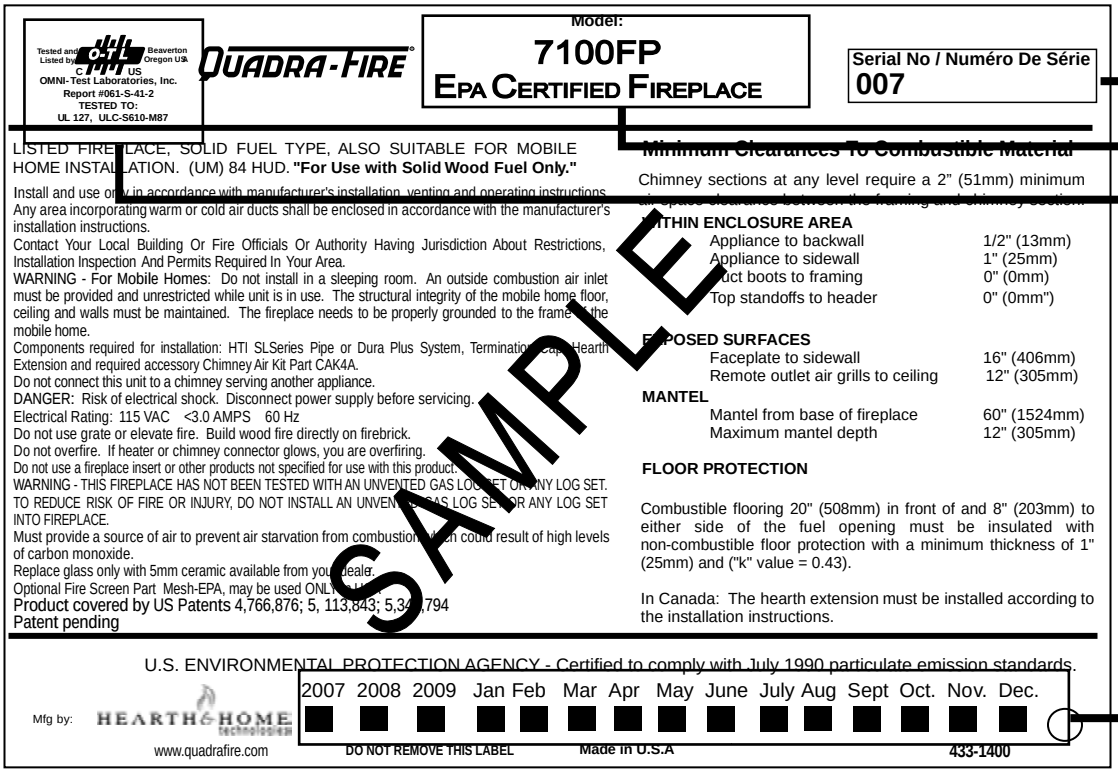

Tested and Listed by OMNI Beaverton Oregon USA
C US
OMNI- Test Laboratories, Inc.
Report #061-S-41-2
TESTED TO:
UL 127, ULC-S610-M87
QUADRA-FIRE
Model:
7100FP
EPA CERTIFIED FIREPLACE
Serial No / Numéro De Série
007
LISTED FIREPLACE, SOLID FUEL TYPE, ALSO SUITABLE FOR MOBILE HOME INSTALLATION. (UM) 84 HUD. "For Use with Solid Wood Fuel Only."
Install and use only in accordance with manufacturer's installation, venting and operation instructions.
Any area incorporating warm or cold air ducts shall be enclosed in accordance with the manufacturer's installation instructions.
Contact Your Local Building Or Fire Officials Or Authority Having Jurisdiction About Restrictions, Installation Inspection And Permits Required In Your Area.
WARNING - For Mobile Homes: Do not install in a sleeping room. An outside combustion air inlet must be provided and unrestricted while unit is in use. The structural integrity of the mobile home floor, ceiling and walls must be maintained. The fireplace needs to be properly grounded to the frame of the mobile home.
Components required for installation: HTI SLSeries Pipe or Dura Plus System, Termination Cap, Hearth Extension and required accessory Chimney Air Kit Part CAK4A.
Do not connect this unit to a chimney serving another appliance.
DANGER: Risk of electrical shock. Disconnect power supply before servicing.
Electrical Rating: 115 VAC <3.0 AMPS 60 Hz
Do not use grate or elevate fire. Build wood fire directly on firebrick.
Do not overfire. If heater or chimney connector glows, you are overfiring.
Do not use a fireplace insert or other products not specified for use with this product.
WARNING - THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET OR ANY LOG SET.
TO REDUCE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET OR ANY LOG SET INTO FIREPLACE.
Must provide a source of air to prevent air starvation from combustion which could result of high levels of carbon monoxide.
Replace glass only with 5mm ceramic available from your dealer.
Optional Fire Screen Part Mesh-EPA, may be used ONLY with
Product covered by US Patents 4,766,876; 5, 113,843; 5,340,794
Patent pending
Minimum Clearances To Combustible Material
Chimney sections at any level require a 2" (51mm) minimum
WITHIN ENCLOSURE AREA
Appliance to backwall 1/2" (13mm)
Appliance to sidewall 1" (25mm)
Duct boots to framing 0" (0mm)
Top standoffs to header 0" (0mm")
EXPOSED SURFACES
Faceplate to sidewall 16" (406mm)
Remote outlet air grills to ceiling 12" (305mm)
MANTEL
Mantel from base of fireplace 60" (1524mm)
Maximum mantel depth 12" (305mm)
FLOOR PROTECTION
Combustible flooring 20" (508mm) in front of and 8" (203mm) to either side of the fuel opening must be insulated with non-combustible floor protection with a minimum thickness of 1" (25mm) and ("k" value = 0.43).
In Canada: The hearth extension must be installed according to the installation instructions.
SAMPLE
U.S. ENVIRONMENTAL PROTECTION AGENCY - Certified to comply with July 1990 particulate emission standards.
Mfg by: HEARTH & HOME technologies
2007 2008 2009 Jan Feb Mar Apr May June July Aug Sept Oct. Nov. Dec.
www.quadrafire.com
DO NOT REMOVE THIS LABEL
Made in U.S.A
433-1400
Serial Number
Model Name
Test Lab & Report No.
Manufactured Date

TABLE OF CONTENTS

Section 1: Listing and Code Approvals
- A. Appliance Certification 4
- B. Mobile Home Approved 4
- C. Glass Specifications 5
- D. BTU & Efficiency Specifications 5

Section 2: Getting Started
- A. Design and Installation Considerations 6
- B. Negative Pressure 6
- C. Typical Fireplace System 8
- D. Tools and Supplies Needed 9
- E. Inspect Fireplace and Components 9

Section 3: Framing and Clearances
- A. Selecting Fireplace Location 10
- B. Clearances 11
- C. Frame the Fireplace 12
- D. Electrical Access and Wiring Diagram 13
- E. Construct the Chase 14

Section 4: Installation of Fireplace
- A. Install the Outside Air Kit 15
- B. Auxiliary Convection Air System 17
- C. Convection Air Lock 18
- D. Secure the Fireplace 19

Section 5: Chimney Assembly
- A. Chimney Requirements 21
- B. Chimney Termination Requirements 21
- C. Using Offsets/Returns 22
- D. Assemble the Chimney Sections 23
- E. Assembling Chimney Sections for SL-300 Series 23
- F. Install the Ceiling Firestops 24
- G. Install the Attic Insulation Shield 25
- H. Double-check the Chimney Assembly 25
- I. Secure the Chimney 25

Section 6: Complete the Enclosure
- A. Chimney Termination (2-10-03 Rule) 26
- B. SL-300 Series Ceiling/Roof Thimble 28
- C. Chase Top 29
- D. Install the Termination Cap 29

Section 7: Accessories
- A. Blower Replacement 31
- B. Baffle Removal and Installation 32
- C. Door and Door Gasket 32
- D. Heat Zone Kit 33
- E. Timer Assembly Replacement 36

Section 8: Finishing
- A. Hearth Extension 38
- B. Calculating Alternate Floor Protection 38
- C. Position the Hearth Extension 41
- D. Finishing Material 41
- E. Non-Combustible Facing Material Installation . . 42
- F. Mantel 43

Section 9: Operating Instructions
- A. General Information 44
- B. Outside Air 45
- C. Clear Space Near the Fireplace 45
- D. Firescreen 45
- E. Glass Doors 45
- F. Blower Operation 46
- G. Heat Zone Operation 46
- H. Wood Fuel 46
- I. Starting a Fire 48
- J. Burning Process 49
- K. Automatic Combustion Control (ACC) 49
- L. Burning Guidelines 50
- M. Burn Rates 50
- N. Opacity 50
- O. Overfiring 51
- P. Chimney Fire 51
- Q. Fire Safety 51

Section 10: Troubleshooting
- A. Understanding Vent Problems 52
- B. Draft Problems 52
- C. Diagnostics and Problem Solving 54

Section 11: Maintenance and Servicing the Fireplace
- A. General Maintenance 56
- B. Glass Replacement 57
- C. Brick Replacement 58
- D. Care and Cleaning of Plated Surfaces 59
- E. Maintenance Task List 59

Section 12: Reference Materials
- A. Fireplace Dimensions 60
- B. Chimney Components 61
- C. Components Diagrams and Schematics 63
- D. Fireplace Diagram 64
- E. Service Parts 65
- F. Accessories 66
- G. Warranty Policy 67
- H. Contact Information 68

1 Listing and Code Approvals

A. Appliance Certification

Model:	7100FP EPA Certified Woodburning Fireplace
Laboratory:	OMNI Test Laboratories, Inc.
Report No:	061-S-41-2
Type:	Wood Fireplace
Standard:	UL127 and ULC-S610-M87 and (UM) 84-HUD, Mobile Home Approved.

This fireplace system has been tested and listed in accordance with UL127 and ULC-S610-M87 standards, and has been listed by OMNI Test Laboratories, Inc., for installation and operation in the United States and Canada as described in this manual. This fireplace has been tested and listed for use with the SL-300 Series chimney (with the the CAK4A Air Kit) and fireplace components listed in Section 12. The Dura-Plus is also an approved venting system manufactured by Dura-Vent Systems.

Check with your local building code agency before you begin your installation to ensure compliance with local codes, including the need for permits and follow-up inspections. Be sure local building codes do not supersede UL specifications and always obtain a building permit so that insurance protection benefits cannot be unexpectedly cancelled.

B. Mobile Home Approved

This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided. The structural integrity of the mobile home floor, ceiling, and walls must be maintained. The fireplace must be properly grounded to the frame of the mobile home and use only listed double-wall connector pipe. Outside Air must be installed in a mobile home installation.

An outside air termination cap is supplied with your 7100 Fireplace for installation in a mobile home. If you use an alternative material it must be designed to prevent material from dropping into the area beneath the mobile home, and to prevent rodents from entering from the outside.

1. An outside air inlet must be provided for combustion and must remain clear of leaves, debris, ice and/or snow. It must be unrestricted while unit is in use to prevent room air starvation which can cause smoke spillage and an inability to maintain a fire. Smoke spillage can also set off smoke alarms.
2. The fireplace is to be secured to the mobile home structure. Use same holes that attached the fireplace to the pallet to secure it to the floor using 1/4 in. x 2 in. (6 mm x 51 mm) lag bolts or equivalent.
3. Unit must be grounded with #8 solid copper grounding wire or equivalent and terminated at each end with N.E.C. approved grounding device.
4. Refer to Minimum Clearances to Combustibles on pages 11-12 and chimney components on pages 62-63.
5. Floor protections requirements on pages 39-41 must be followed precisely.
6. Use silicone to create an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.
7. Follow the chimney and chimney connector manufacturer's instructions when installing the flue system for use in a mobile home.
8. If unit burns poorly while an exhaust blower is on in home, (i.e., range hood), increase combustion air.

NOTE: Top sections of chimney must be removable to allow maximum clearance of 13.5 ft (411 cm) from ground level for transportation purposes.

⚠ WARNING

Fire Risk.

For use with solid wood fuel only.
Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).

CAUTION

Maintain structural integrity of mobile home:

- Floor, wall, ceiling and/or roof.

Do NOT cut through:

- Floor joist, wall, studs or ceiling trusses.
- Any supporting material that would affect the structural integrity.

⚠ WARNING

Asphyxiation Risk.

- Never install in a sleeping room.

Consumes oxygen in the room.

C. Glass Specifications

This fireplace is equipped with 5mm ceramic glass. Replace glass only with 5mm ceramic glass. Please contact your dealer for replacement glass.

NOTE: Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

D. BTU & Efficiency Specifications

EPA Certified:	3.1 grams per hour
Efficiency:	up to 77%
BTU Output **with EPA test fuel:** **with cord wood:**	 58,500/ hr. 90,000/hr
Heating Capacity:	up to 3,500 sq ft
Vent Size:	6 inches
Max Wood Length:	24 inches
Fuel:	Cord Wood
Shipping Weight:	570 lbs

WARNING

Fire Risk

- **Do not** install or operate damaged fireplace.
- **Do not** modify fireplace.
- Installation other than as instructed by Hearth & Home Technologies Inc. is strictly prohibited.
- **Do not** operate the fireplace without fully assembling all components.
- **Do not overfire**.
- **Do not install an unvented gas log set.** This fireplace has not been tested for use with unvented gas log sets.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Hearth & Home Technologies disclaims any responsibility for, and the warranty and agency listing will be voided by the above actions.

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this fireplace. For assistance or additional information consult a qualified installer, service agency or your dealer.

2 Getting Started

A. Design and Installation Considerations

CAUTION

Check building codes prior to installation.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction about restrictions, installation inspection and permits.

When planning a fireplace installation, it is necessary to determine the following information before installing:

- Where the fireplace is to be installed. See Sections 3 and 4.
- The vent system configuration to be used. See Sections 5 and 6.
- Electrical wiring. See Section 3.
- Framing and finishing details. See Sections 3, 6 and 8.
- Whether optional accessories are desired. See Section 12.

Draft is the pressure difference needed to vent fireplaces successfully. Considerations for successful draft include:

- Preventing negative pressure
- Location of fireplace and chimney

WARNING

Asphyxiation Risk

Negative pressure can cause spillage of combustion fumes and soot. Fire needs to draft properly for safe operation.

B. Negative Pressure

Negative pressure results from the imbalance of air available for the fireplace to operate properly. Causes for this imbalance include:

- Exhaust fans (kitchen, bath, etc.).
- Range hoods.
- Combustion air requirements for furnaces, water heaters and other combustion appliances.
- Clothes dryers.
- Location of return-air vents to furnace or air conditioning.
- Imbalances of the HVAC air handling system.
- Upper level air leaks: recessed lighting, attic hatch opening, duct leaks.

To minimize the effects of negative air pressure, the following must be considered:

- Install the outside air kit.
- Ensure adequate outdoor air is supplied for combustion appliances and exhaust equipment.
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the fireplace.
- Avoid installing the fireplace near doors, walkways or small isolated spaces.
- Recessed lighting should be a “sealed can” design; attic hatches weather stripped or sealed; attic mounted duct work and air handler joints and seams taped or sealed.

Location of the fireplace and chimney will affect performance. As shown in Figure 7.1, on page 7, the chimney should:

- Be installed through the warm airspace enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.
- Penetrate the highest part of the roof. This minimizes the effects of wind turbulence.
- Be located away from trees, adjacent structures, uneven roof lines and other obstructions.

Offsets can restrict draft so their use should be minimized. Consider the fireplace location relative to floor and ceiling and attic joists.

The 7100FP Fireplace requires a minimum flue draft of -0.10 inches of water column on High, and -0.04 inches of water column on Low, as measured with a draft meter. Most dealers have draft meters available to measure your flue draft if you suspect a problem.

If the fire is difficult to start, and smoke spills out of the door, or you find it hard to establish and maintain a moderately high burn rate, then the flue draft is too low and corrective measures must be taken.

NOTE: Cold air infiltration can cause frosting on glass.

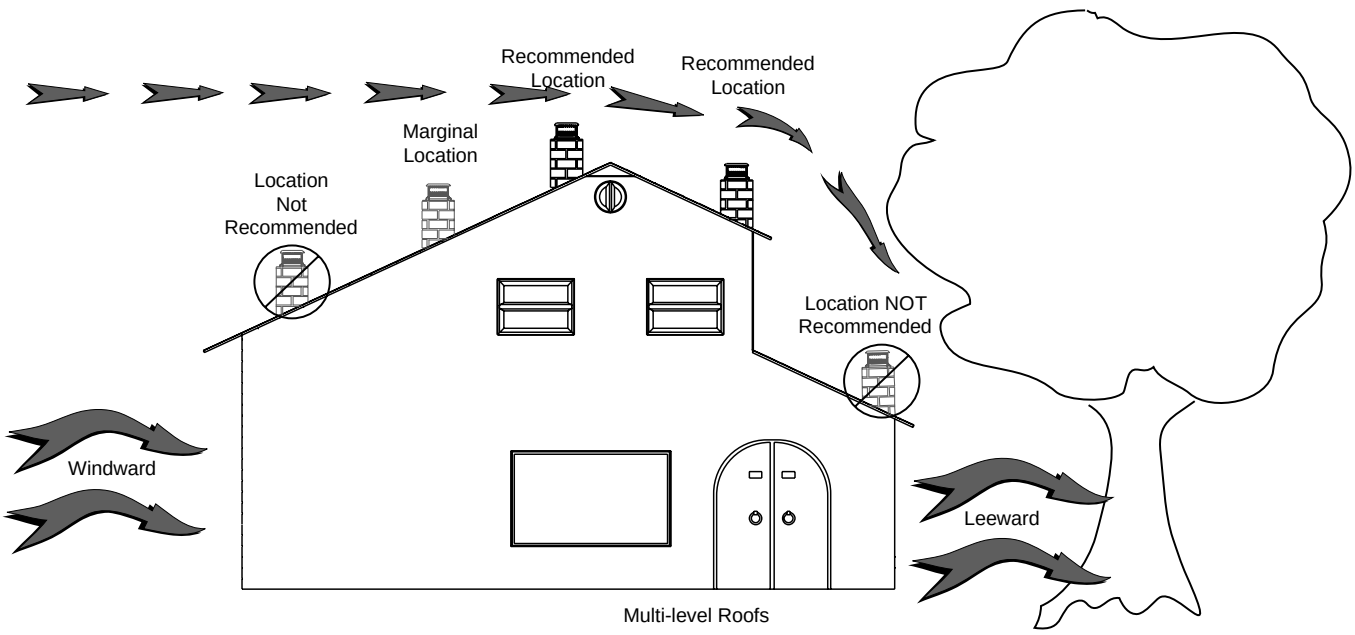


Figure 7.1 Recommended Chimney Locations

C. Typical Fireplace System

The Quadra-Fire fireplace system consists of the following:

- Fireplace
- Firebrick
- Chimney termination cap
- Chimney system
- Hearth extension
- Outside air

Required components include:

- Chimney Air Kit (with SL 300 Series Pipe)

Optional components include:

- Firescreen
- Lintel Bar
- Heat Zone Kit
- Top Vent Kit

Note: Junction box should be installed during initial setup to avoid major reconstruction.

NOTE: Illustrations used throughout these instructions reflect “typical installations” and are for design purposes only. Actual installation may vary slightly due to individual design preferences. However, minimum clearances must be maintained at all times.

The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

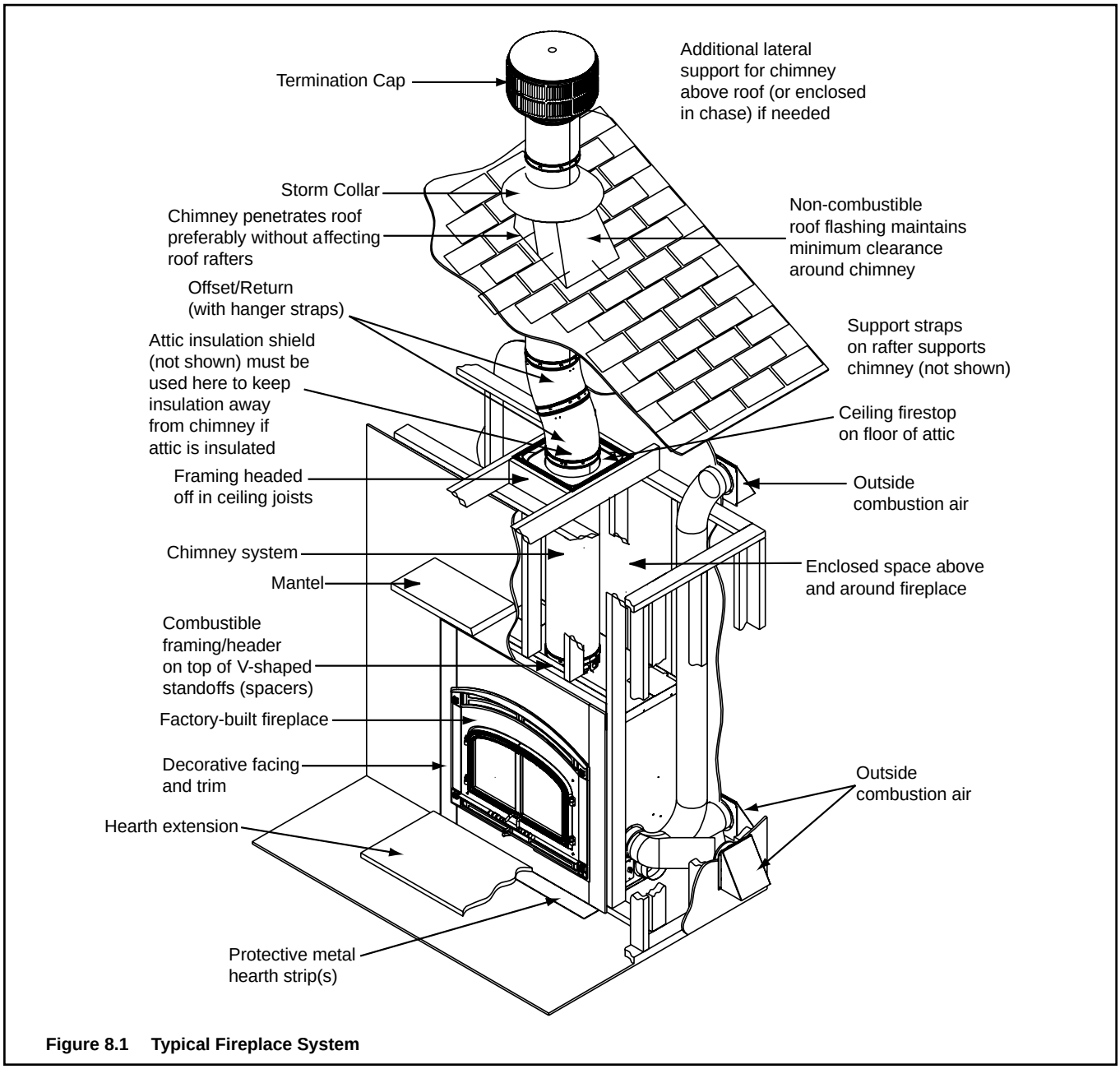

Termination Cap
Additional lateral support for chimney above roof (or enclosed in chase) if needed
Storm Collar
Chimney penetrates roof preferably without affecting roof rafters
Non-combustible roof flashing maintains minimum clearance around chimney
Offset/Return (with hanger straps)
Support straps on rafter supports chimney (not shown)
Attic insulation shield (not shown) must be used here to keep insulation away from chimney if attic is insulated
Ceiling firestop on floor of attic
Framing headed off in ceiling joists
Outside combustion air
Chimney system
Enclosed space above and around fireplace
Mantel
Combustible framing/header on top of V-shaped standoffs (spacers)
Factory-built fireplace
Decorative facing and trim
Outside combustion air
Hearth extension
Protective metal hearth strip(s)

Figure 8.1 Typical Fireplace System

D. Tools and Supplies Needed

Before beginning the installation be sure the following tools and building supplies are available:

Reciprocating saw	Framing material
Pliers	High temp caulking material
Hammer	Gloves
Phillips screwdriver	Framing square
Flat blade screwdriver	Electric drill and bits
Plumb line	Safety glasses
Level	Tape measure

1/2-3/4 in. length, #6 or #8 self-drilling screws

Misc. screws and nails

CAUTION

- Keep fireplace dry.
- Mold or rust may cause odors.

E. Inspect Fireplace and Components

WARNING

Fire Risk

Explosion Risk

Inspect fireplace and components for damage. Damaged parts may impair safe operation.

- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components

Report damaged parts to dealer.

- Carefully remove the fireplace and components from the packaging.
- Doors are shipped on the fireplace.
- Report to your dealer any parts damaged in shipment.

WARNING

Fire Risk.

- Do not operate appliance before reading and understanding operating instructions.
- Failure to operate appliance properly may cause a house fire.

3 Framing and Clearances

WARNING

Fire Risk

Provide adequate clearances.

- Around air openings
- To combustibles
- For service access.

Locate fireplace away from traffic areas.

Note:

- Illustrations and photos reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation/appearance may vary due to individual design preference.
- Hearth & Home Technologies reserves the right to alter its products.

A. Selecting Fireplace Location

Several options are available to you when choosing a location for your fireplace. This fireplace may be used as a room divider, installed along a wall, across a corner or used in an exterior chase. See Figure 10.1.

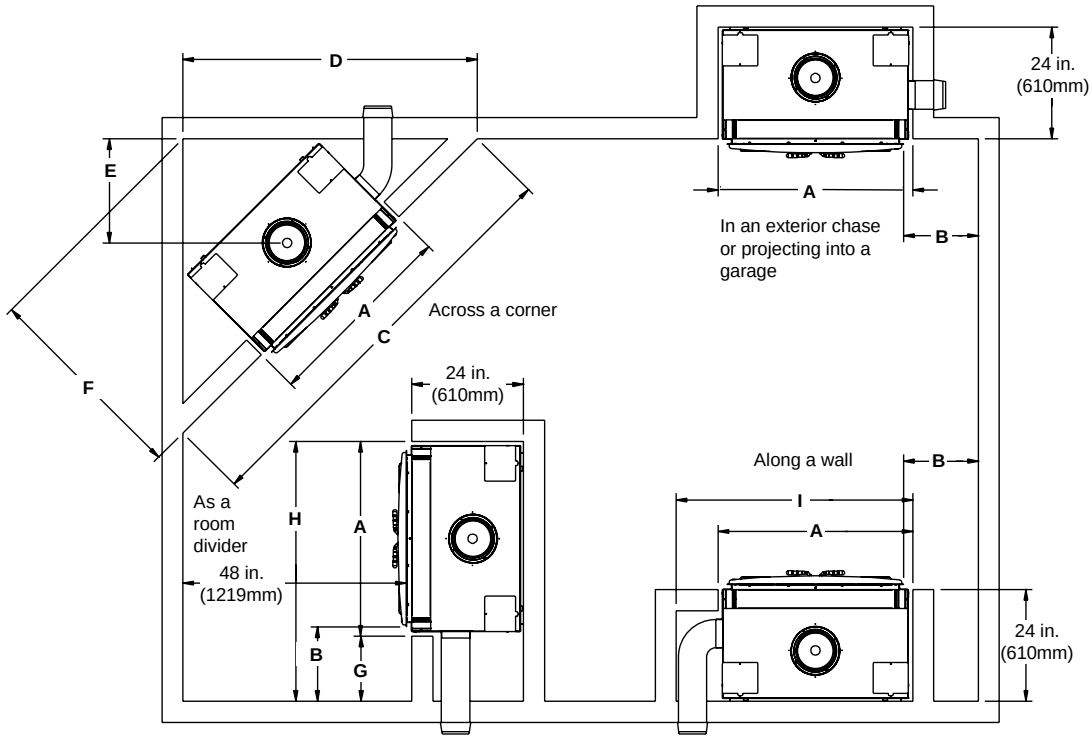
Locating the fireplace in a basement, near frequently opened doors, central heat outlets or returns, or other locations of considerable air movement can affect the performance and cause intermittent smoke spillage from the front of the fireplace when no outside air is used. Outside air must be used for combustion. The 7100FP comes equipped with an outside air inlet to feed combustion air from outside the home, along with an outside air termination cap. Consideration should be given to these factors before deciding on a location. See Sections 2 and 10.

Note: A minimum 1/2 in. air clearance must be maintained at the back and 1 in. minimum clearance to the sides of the fireplace assembly.

Chimney sections at any level require a 2 in. minimum air space clearance between the framing and chimney sections.

Note: In addition to these framing dimensions, also reference the following sections:

- Clearances (Section 3.B.)
- Mantel (Section 8.F.)
- Fireplace Dimensions (Section 12.A.)



Model #7100FP (Dimensions for finished walls)		A	B	C	D	E	F	G	H	I
	in.	41-7/8	16	89-1/2	63-5/16	22-7/16	44-3/4	14-1/16	55-15/16	50-7/8
	mm	1063	406	2273	1608	570	1137	357	1421	1292

Figure 10.1 Fireplace Locations

B. Clearances

WARNING

Fire Risk

- Comply with all minimum clearances to combustibles as specified.
- Framing or finishing material used on the front of, or in front of, the appliance closer than the minimums listed, must be constructed entirely of non-combustible materials (i.e., steel studs, concrete board, etc.).

Failure to comply may cause fire.

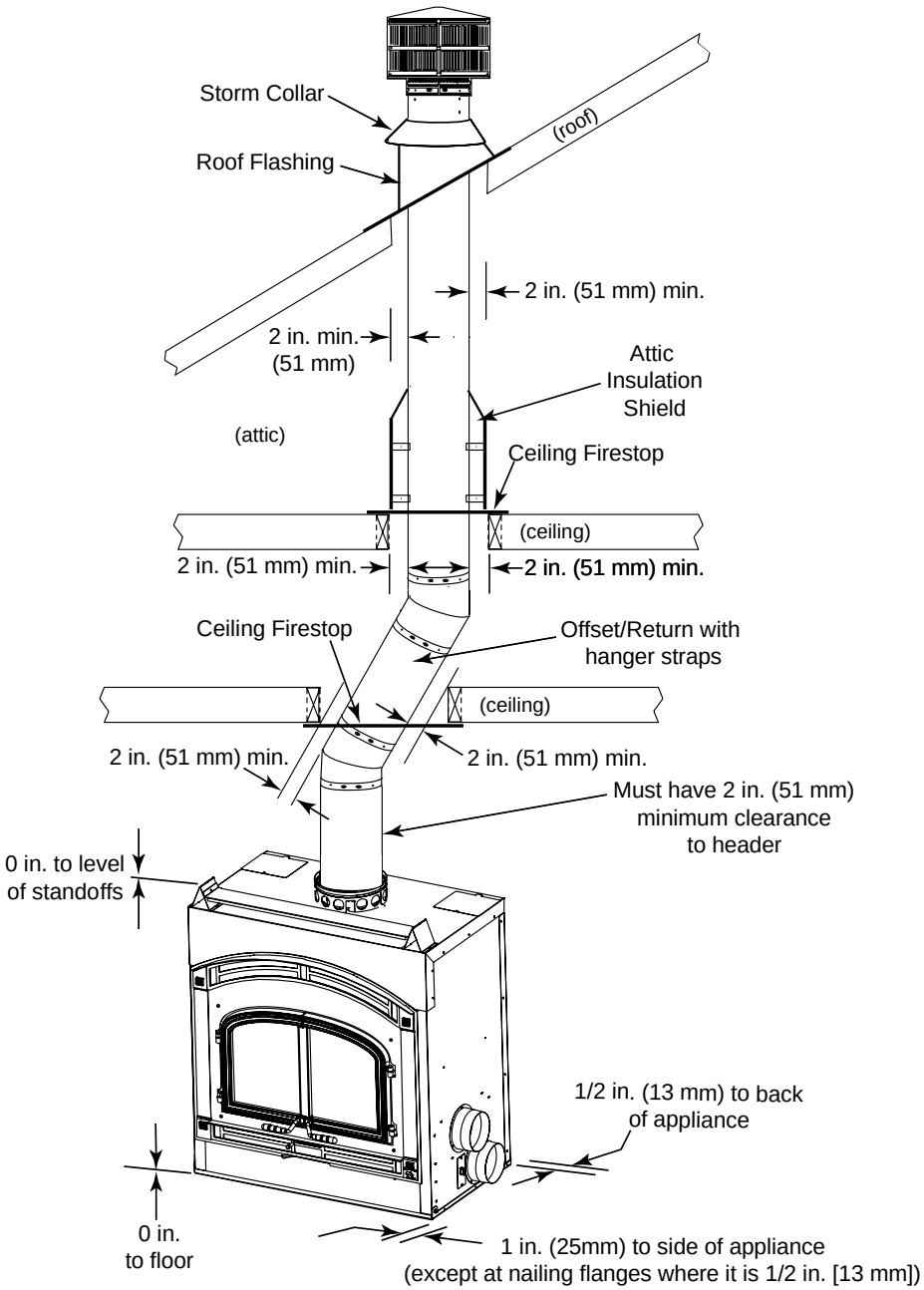


Figure 11.1 Clearances to Combustible Materials

Minimum Clearances to Combustibles

WITHIN ENCLOSURE AREA:

Appliance to backwall	1/2 in. (13 mm)
Appliance to sidewall	1 in. (25 mm)
Duct boots to framing	0 in. (0 mm)
Top standoffs to header	0 in. (0 mm)
Door opening to sidewall	22-7/8 in. (581 mm)

EXPOSED SURFACES

Faceplate to sidewall	16 in. (406 mm)
Heat zone air grills to ceiling	12 in. (305 mm)

MANTEL

Combustible and non-combustible mantel minimum height from base of fireplace to underside of mantel	60 in. (1524 mm)
Maximum mantel depth	12 in. (305 mm)

OPTIONAL FRAMING CONSTRUCTION / REDUCED MANTEL HEIGHT:

Non-combustible mantel material minimum height from base of fireplace to underside of mantel 46 in. (1168mm) when the following enclosure construction materials are used:

Non-combustible framing materials must be used above fireplace to height of 84 in. (2134mm) from base of fireplace for all construction materials, framing members, sheeting, and all finish materials.

Non-Combustible Materials

Materials which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials, in a Vertical Tube Furnace at 750°C, shall be considered non-combustible materials.

Combustible Materials

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other materials that can ignite and burn, whether flame proofed or not, or whether plastered or un-plastered shall be considered combustible materials.

WARNING

Fire Risk

Hearth & Home Technologies is not responsible for discoloration, cracking or other material failures of finishing materials due to heat exposure or smoke.

- Choose finishing materials carefully.

WARNING

Fire Risk

- Non-combustible mantels installed at a reduced height may GET EXTREMELY HOT during use of the fireplace.
- DO NOT TOUCH or place heat sensitive combustible items on the mantel.

CHIMNEY SECTIONS

Chimney sections at any level require a 2 in. (51 mm) minimum air space clearance between the framing and chimney section.

C. Frame the Fireplace

NOTE: Wiring for blowers must be done before framed enclosure is completed. If using a Heat Zone kit, it also must be installed before enclosure is complete.

The 7100FP Fireplace will fit a framed opening height of 45-7/8 in. (1165 mm) tall and width of 42 in. (1067 mm). The finished cavity depth must be no less than 24 in. (610 mm). Framing must extend straight up all the way to the ceiling.

Figure 12.1 shows a typical framing (using 2 x 4 lumber) of the fireplace, assuming combustible materials are used. All required clearances to combustibles around the fireplace must be adhered to. See Figure 11.1, on page 11. Any framing across the top of the fireplace must be above the level of the top standoffs. (No recess above standoffs.)

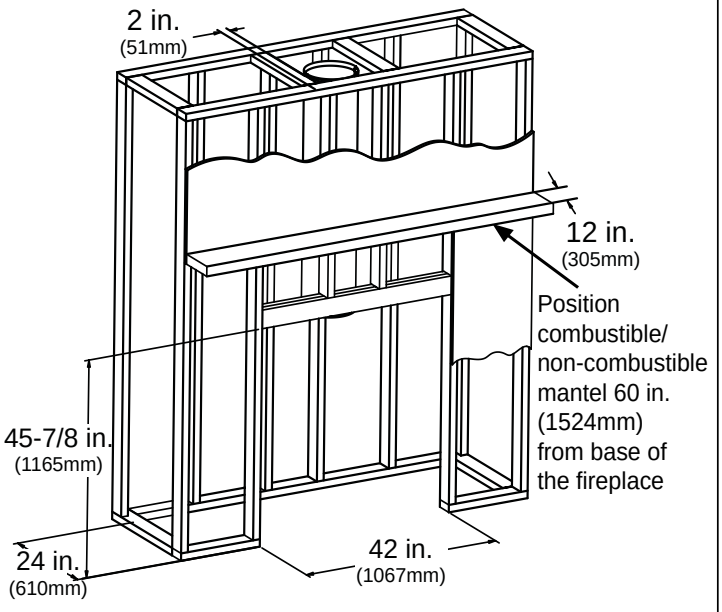


Figure 12.1 Framing the Fireplace

Suggestions:

1. Insulate chase.
2. Finish chase walls with dry wall 5/8 in. (16mm) Type X face tape.
3. All dimensions are to finished walls and ceilings.

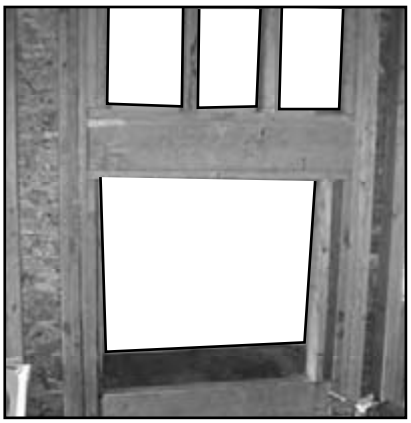


Figure 13.1 Sheetrocked Chase

WARNING

Fire Risk
Comply with all minimum clearances specified.

- A minimum 1/2 in. (13mm) air clearance must be maintained at the back and 1 in. (25mm) to the sides of the fireplace assembly.
- Chimney sections at any level require a 2 in. (51mm) minimum air space clearance between the framing and chimney section.

WARNING

Fire Risk
Do not apply combustible finishing materials over any part of the front of this fireplace.

- The metal fireplace face may only be covered with noncombustible materials such as ceramic tile, brick, or stone.
- Do not cover or block any cooling air slots.

The decorative fascia must be removable for future serviceability of the Automatic Combustion Control.

WARNING

Fire Risk

- Maintain clearances.
- Use only non-combustible material below standoffs, material such as cement board is acceptable.
- Framing or finishing material used on the front of, or in front of, the appliance closer than the minimums listed, must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.).

D. Electrical Access and Wiring Diagram

NOTE: The manual override switch, rheostat speed control and cover plate are supplied. You will need to supply: 14-3 wire with ground; 14-2 wire with ground; standard wall mount junction box; wire nuts.

1. Remove junction box cover plate on the bottom right side of the fireplace.
2. Thread the 14-3 with ground wire through the opening with the strain relief on the cover plate.
3. Match colors to wire harness, (red to red, white to white, etc) and secure with wire nuts.

NOTE: Wiring for blowers must be done before framed enclosure is completed. If using a Heat Zone kit, it also must be installed before enclosure is complete.

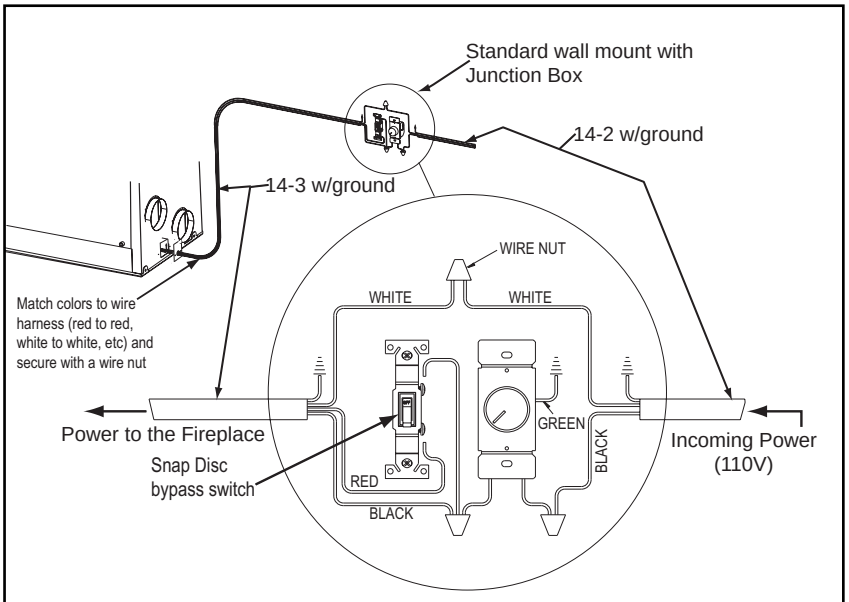


Figure 13.2 Fan Wiring Diagram

E. Construct the Chase

A chase is a vertical boxlike structure built to enclose the fireplace and/or its vent system. Vertical chimneys that run on the outside of a building must be installed inside a chase.

In cold climates, it is recommended that the chase be well insulated using batt type insulation between the joists.

Construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Local building codes MUST be checked.

Chases should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner. All outer walls need to be insulated.

Building codes require false ceiling and ceiling firestops at each floor of the chase or every 10 ft (3048 mm) of clear space to control spread of fire.

Walls, ceiling, base plate and cantilever floor at the first level of the chase should be insulated. See Figure 14.1. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, Hearth & Home Technologies recommends that the inside surfaces be sheet rocked and taped (or the use of an equivalent method) for maximum air tightness.

Holes and other openings should be caulked with high temperature caulk or stuffed with unfaced fiber glass insulation.

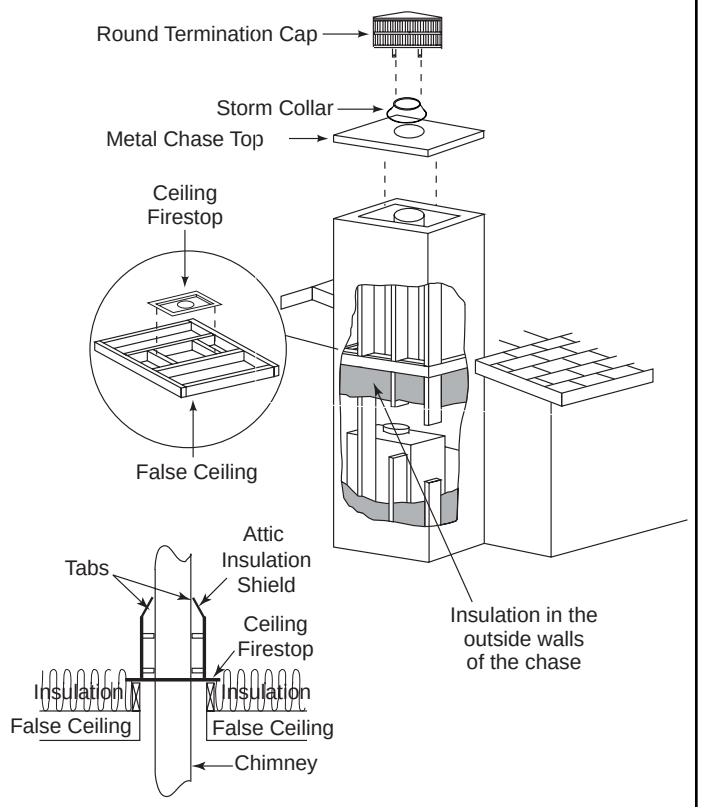


Figure 14.1 Chase Assembly

Materials

a. The chase is constructed using framing materials much the same as the walls in your home. A variety of siding materials may be used including brick, stone, veneer brick, or standard siding materials.

b. In constructing the chase, several factors must be considered:

1) Maintain a 2 in. (51 mm) air space around the chimney.

2) The chase top must be constructed of non-combustible material.

3) In cold climates, a firestop spacer should be installed in an insulated false ceiling at the 8 ft. (2438 mm) level above the fireplace assembly. This reduces heat loss through the chase.

4) In cold climates, the walls of the chase should be insulated to the level of the false ceiling as shown in Figure 14.1. This will help reduce heat loss from the home around the fireplace.

Three examples of chase applications are shown in Figure 14.2.

1. Fireplace and chimney enclosed in an exterior chase.
2. Chimney offset through exterior wall and enclosed in chase.
3. Chase constructed on roof.

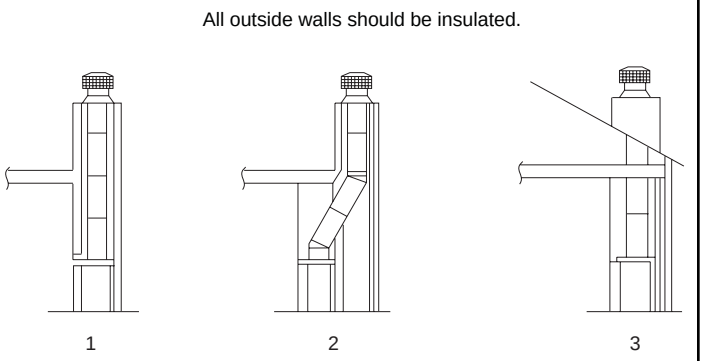


Figure 14.2 Chase Constructions

4 Installation of Fireplace

CAUTION

Sharp Edges

- Wear protective gloves and safety glasses during installation.

A. Install the Outside Air Kit

This fireplace will operate correctly only if adequate ventilation is provided to allow proper draft to the fireplace system. See Section 2.

Using an outside air kit must be used for combustion to minimize the effects of negative pressure within the structure. We recommend you utilize the shortest duct run to optimize the performance of the outside air kit. The outside air kit inlet should be positioned in a manner that will not allow snow, leaves, etc. to block the inlet. In some installations the air duct may need to be run vertically. In such an installation, a 3 ft (914 mm) height difference must be maintained from the top of the uppermost chimney section to the outside combustion air inlet. See Figure 16.1 on page 16.

See Figure 16.2 on page 16 for proper placement of outside air inlet.

The outside air kit is installed on the right hand side of the fireplace. See Figure 15.1 for handle location/operation.

1. Cut a 6 in. (152 mm) hole in outside wall to accommodate air piping. The outside air is located on top, auxiliary convection air intake is located on the bottom. See Figure 15.1.
2. Use 6 in. (152 mm) metal flex or rigid piping *(not supplied)* to directly connect outside air to fireplace intake. Insulate the pipe to prevent frost condensation.
3. Use the supplied termination caps.
4. Seal between the wall and the pipe with silicone to prevent moisture penetration and air leaks.
5. Seal between the termination cap and the house with silicone to prevent air infiltration.

NOTE: A control knob allows you control of the outside air inlet. Use of outside air for combustion is required to conserve heated air within the structure and to provide make up air to keep the fireplace venting properly.

IMPORTANT!

TURN CLOCKWISE TO "OPEN" POSITION.

OUTSIDE AIR KNOB MUST BE IN THE "OPEN" POSITION TO OPERATE FIREPLACE PROPERLY.

MAY BE CLOSED WHEN NOT IN USE TO PREVENT COLD AIR INFILTRATION.

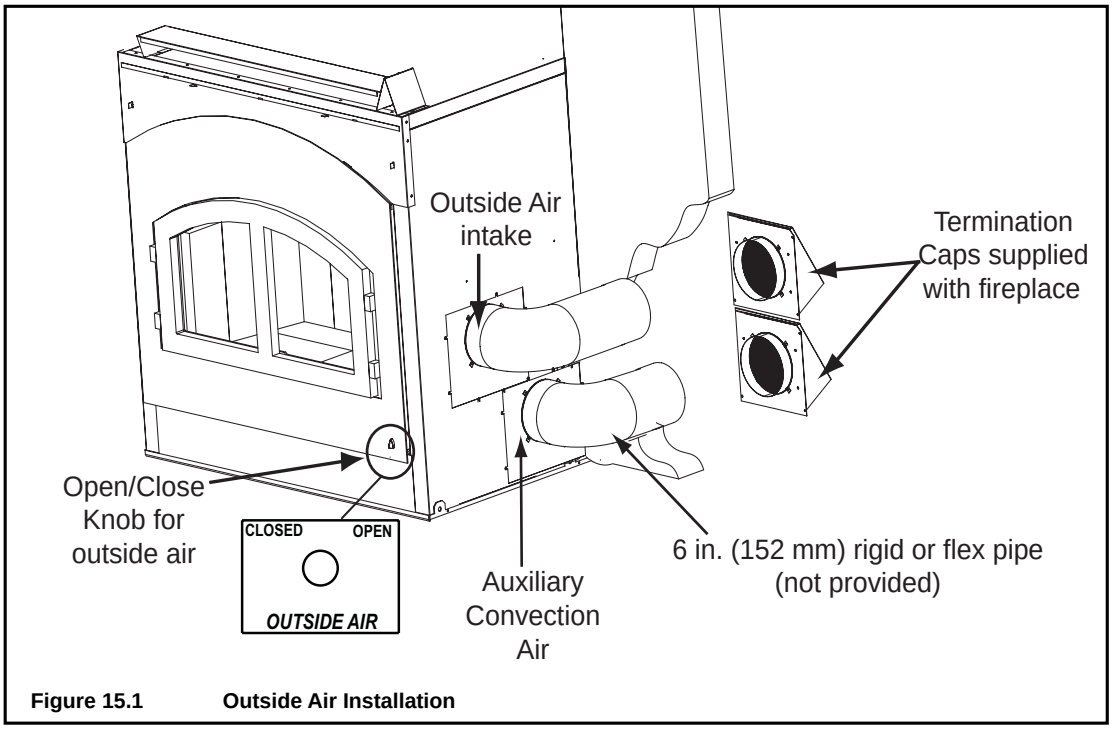


Figure 15.1 Outside Air Installation

WARNING

Fire Risk

Asphyxiation Risk

Do not draw outside combustion air from:

- Wall, floor or ceiling cavity.
- Enclosed space such as an attic or garage.
- Close proximity to exhaust vents or chimneys.

Fumes or odor may result.

CAUTION

Risk of Smoke Spillage

Outside air inlet must be located to prevent blockage from:

- Leaves
- Snow/ice
- Other debris

Blockage may cause combustion air starvation.

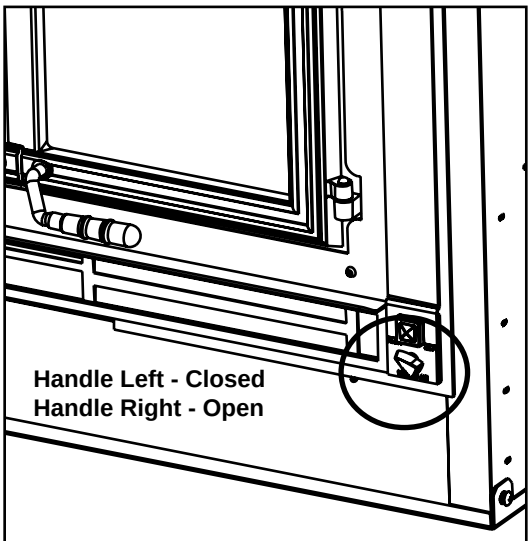


Figure 16.2 Locating the Outside Air Control

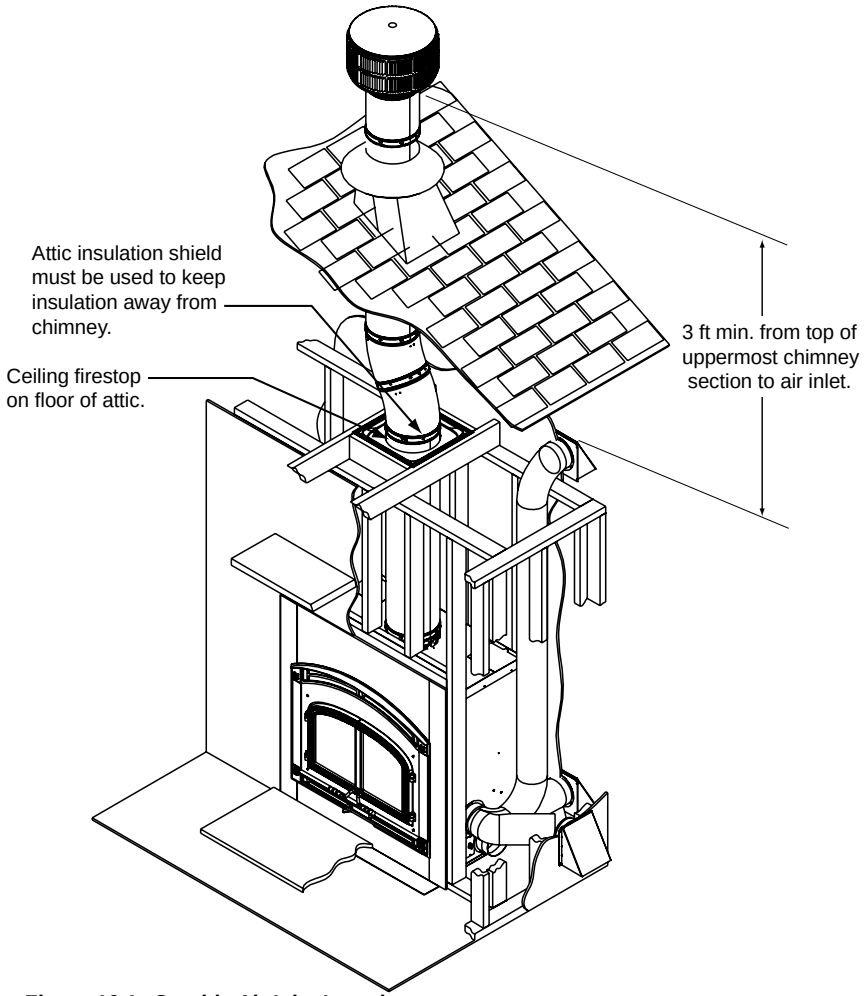

Attic insulation shield must be used to keep insulation away from chimney.
Ceiling firestop on floor of attic.
3 ft min. from top of uppermost chimney section to air inlet.

Figure 16.1 Outside Air Inlet Locations

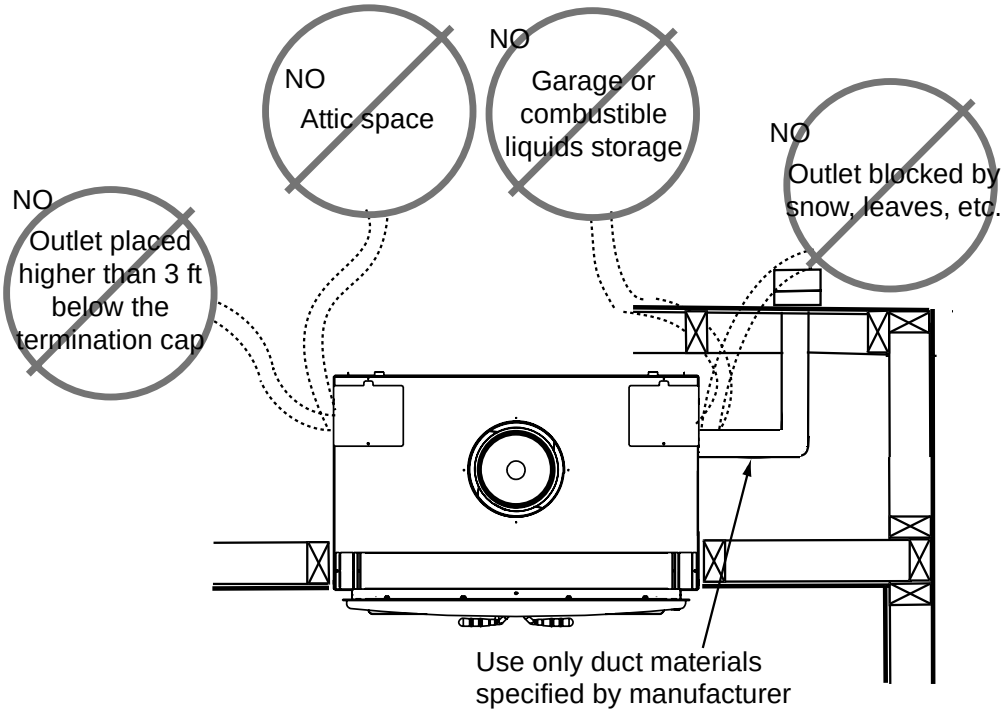


Figure 17.1 Outside Convection Air Placement

B. Auxiliary Convection Air System

Both the Outside Air and Auxiliary Air kits are installed on the right hand side of the fireplace.

Auxiliary convection air allows you to use outside air to flow over the blowers, where it is heated and then distributed into the room producing positive pressure inside the home. Alternatively, you can also run a 6 in. (152 mm) duct to another location in your home and use as a cold air return within the home.

The auxiliary convection lever allows you to change the fireplace from a zone heater into a whole house heater.

LEFT: Slide to the left and use the fireplace as a zone heater. This option pulls room air into the bottom grille of the fireplace, heats the air and re-circulates it to the room(s).

RIGHT: Slide to the right and use the fireplace as a whole house heater for room convection air.

The auxiliary convection lever is located underneath the front lower panel. See Figure 17.2.

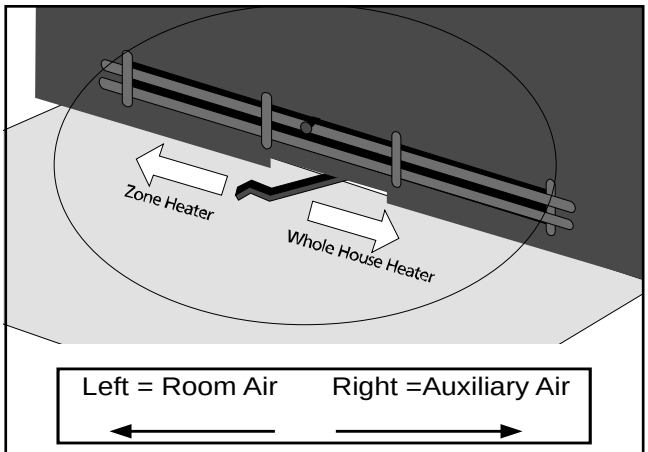


Figure 17.2 Auxiliary Convection Air Lever

The auxiliary convection lever allows you to choose where the convection air is coming from. You can either use room air from the same room where the fireplace is installed (all the way to the left) or from duct work which can be run to another room in the house or to the exterior of the home to use outside air (all the way to the right).

NOTE: If you live in an area that experiences very cold winter months, you will want to pull in room air from your home as opposed to pulling in cold air from the outside of the home. This will eliminate creating a draft of cold outside air infiltrating your home when your are not using your fireplace.

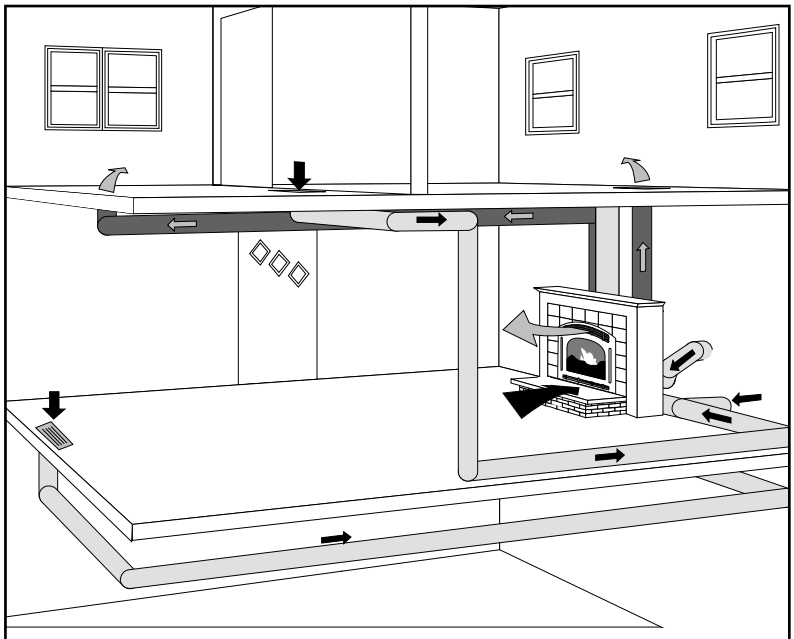


Figure 18.1

C. Convection Air Lock

Auxiliary convection air control is locked. If you are going to use this function for air movement you must remove the lock.

After removing the fascia, remove the one screw and plate to allow the handle to be moved in the full motion right to left. See Figure 18.2.

Discard the plate and screw. Replace fascia.

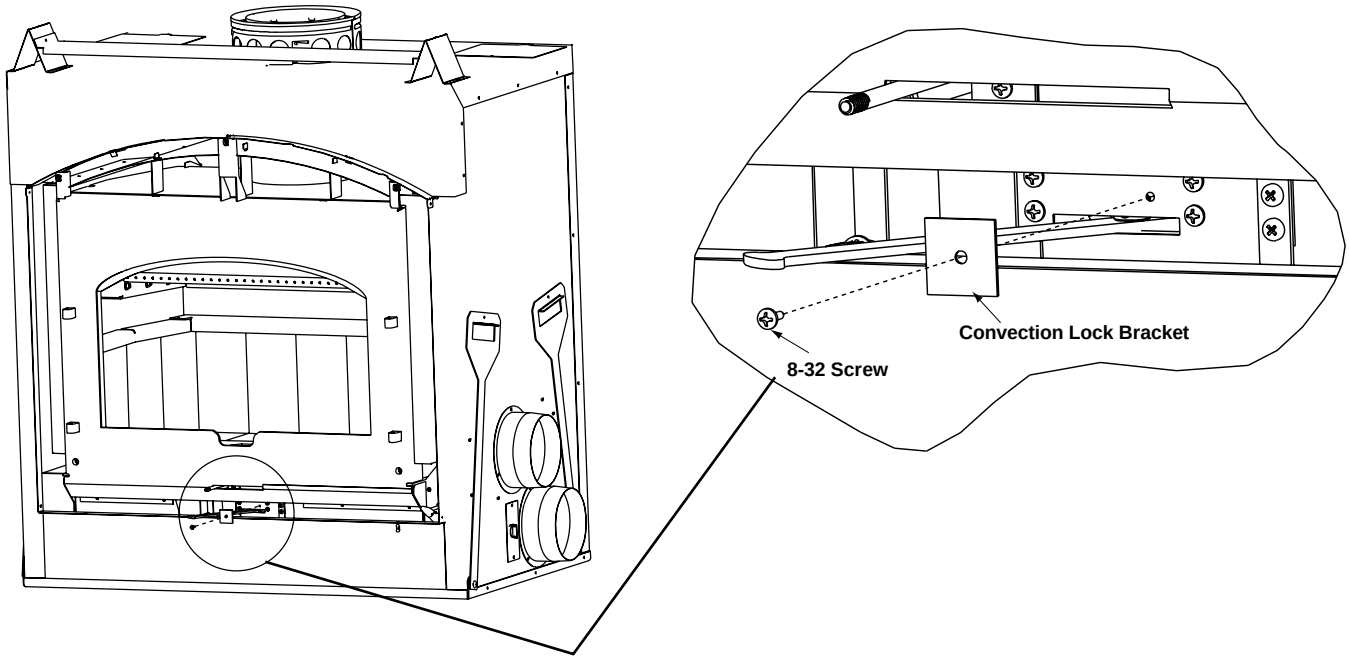


Figure 18.2

D. Secure the Fireplace

- **Position the Fireplace**

  This fireplace may be placed on either a combustible or non-combustible continuous flat surface. Follow the instructions for framing in Section 3.C. Slide the fireplace into position. Be sure to provide the minimum 1 in. (25 mm) air clearance at the sides and 1/2 in. (13 mm) at back of the fireplace assembly. See Section 3.B.

CAUTION

Sharp Edges

- Wear protective gloves and safety glasses during installation.

WARNING

Fire Risk!

- Prevent contact with sagging, loose insulation.
- Do NOT install against vapor barriers or exposed insulation.

WARNING

Fire Risk!

- Metal hearth strips MUST be installed.

Sparks or embers may ignite flooring.

- **Place the Protective Metal Hearth Strips**

  Included with your fireplace you will find two metal hearth strips measuring approximately 23 in. x 4 in. (584 mm x 102 mm). These strips are used to provide added protection where the fireplace and the hearth extension meet.

  Slide each metal strip 2 in. (51 mm) under the front edge of the fireplace. The individual pieces must overlap each other by 1 in. (25 mm) minimum in the middle of the fireplace to provide continuous coverage of the floor. See Figure 19.1. These metal strips should extend from the front and sides of the fireplace opening by 2 in. (51 mm). Nail or screw metal strips in place.

Note: When elevating the fireplace above the hearth extension the front of the elevated platform must be protected with a protective metal hearth strip (not included) as shown in Figure 19.2.

- **Level the Fireplace**

  Level the fireplace side-to-side and front-to-back. Shim with noncombustible material, such as sheet metal, as necessary. Secure the fireplace (using the pallet mounting brackets located on either side of the fireplace) to the subfloor.

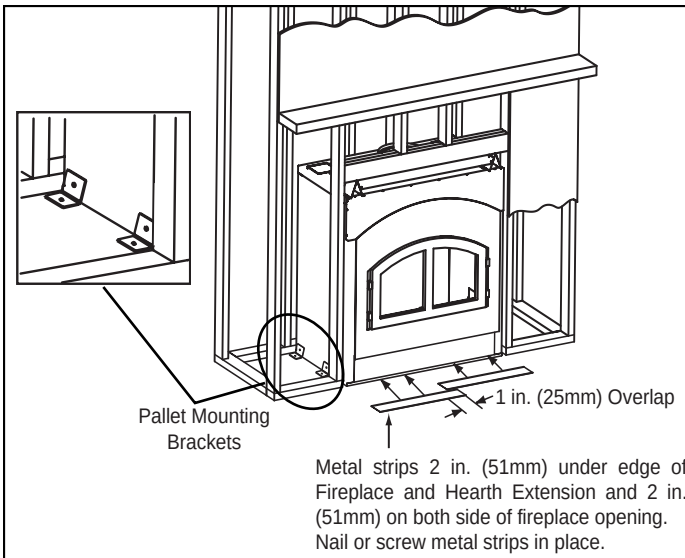

Pallet Mounting Brackets
1 in. (25mm) Overlap
Metal strips 2 in. (51mm) under edge of Fireplace and Hearth Extension and 2 in. (51mm) on both side of fireplace opening. Nail or screw metal strips in place.

Figure 19.1 Position the Protective Metal Hearth Strips

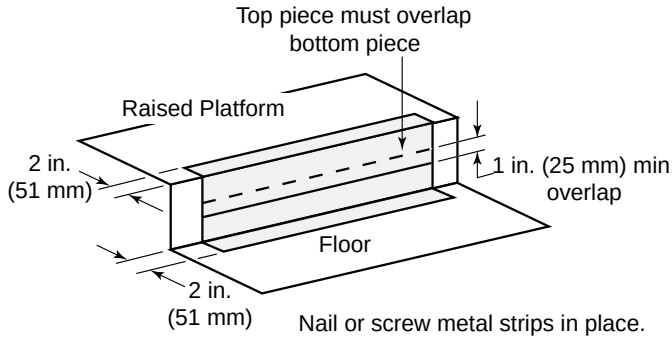

Top piece must overlap bottom piece
Raised Platform
2 in. (51 mm)
1 in. (25 mm) min. overlap
Floor
2 in. (51 mm)
Nail or screw metal strips in place.

Figure 19.2 Protect the Front of an Elevated Platform

5 Chimney Assembly

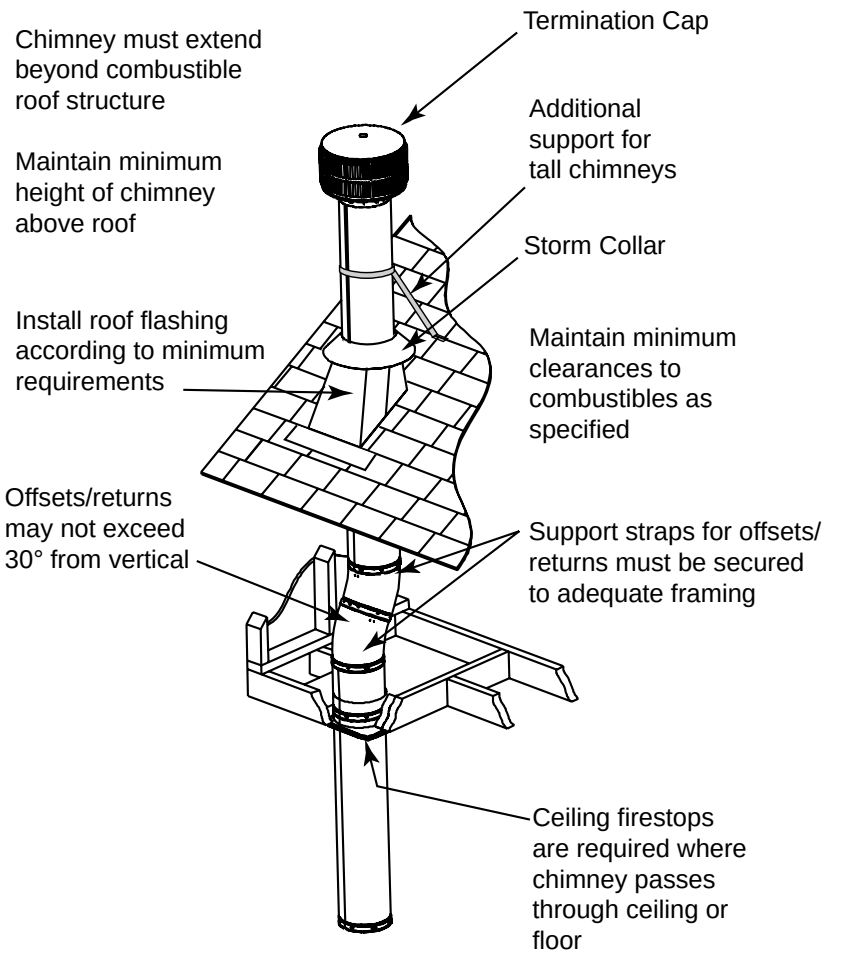

Chimney must extend beyond combustible roof structure
Termination Cap
Additional support for tall chimneys
Maintain minimum height of chimney above roof
Storm Collar
Install roof flashing according to minimum requirements
Maintain minimum clearances to combustibles as specified
Offsets/returns may not exceed 30° from vertical
Support straps for offsets/ returns must be secured to adequate framing
Ceiling firestops are required where chimney passes through ceiling or floor

Figure 20.1 Typical Chimney System - Guidelines for Chimney System Installation

NOTE:

- Chimney performance may vary.
- Trees, buildings, roof lines and wind conditions affect performance.
- Chimney height may need adjustment if smoking or overdraft occurs.

A. Chimney Requirements

Vertical distances are measured from the base of the fireplace as shown in Figure 21.1.

Minimum overall straight height	13 ft	3.96 m
Minimum height with single offset/ return	14.5 ft	4.42 m
Double offset/return minimum height	20 ft	6.1 m
Maximum height	50 ft	15.24 m
Maximum chimney length between an offset and return	20 ft	6.1 m
Maximum distance between chimney stabilizers	35 ft	10.67 m
Maximum unsupported chimney length between the offset and return	6 ft	1.83 m
Maximum unsupported chimney height above the fireplace	35 ft	10.67 m
Maximum unsupported chimney above roof	6 ft	1.83 m

Note: A maximum of two pairs of offsets and returns may be used.

WARNING

Fire Risk

- Must maintain 2 in. (51 mm) air clearance to insulation and other combustible materials.

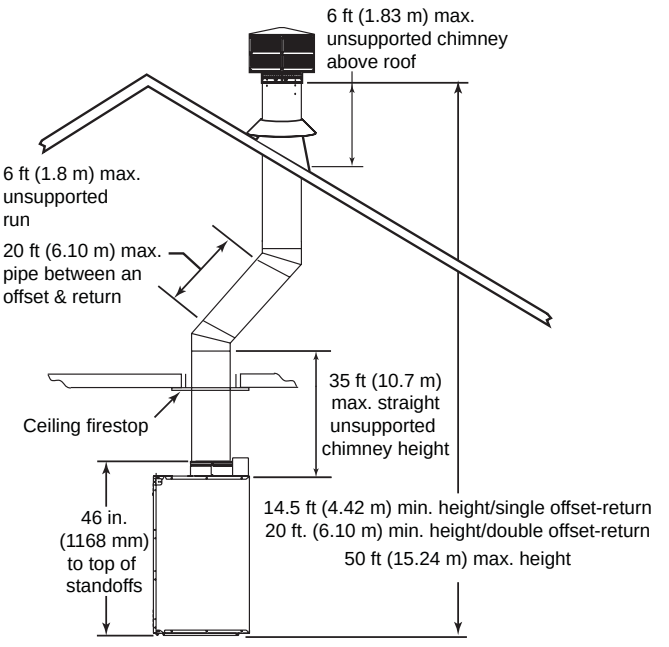

6 ft (1.83 m) max. unsupported chimney above roof
6 ft (1.8 m) max. unsupported run
20 ft (6.10 m) max. pipe between an offset & return
35 ft (10.7 m) max. straight unsupported chimney height
Ceiling firestop
46 in. (1168 mm) to top of standoffs
14.5 ft (4.42 m) min. height/single offset-return
20 ft. (6.10 m) min. height/double offset-return
50 ft (15.24 m) max. height

Figure 21.1 Chimney Requirements

B. Chimney Termination Requirements

To determine the chimney components needed to complete your particular installation, follow the steps below:

- Determine the total vertical height of the fireplace installation. This dimension is measured from the base of the fireplace assembly to the point where the smoke exits the termination cap.
- Subtract the effective height of the fireplace assembly from the overall height of the fireplace installation (measured from the base of the fireplace to the bottom of the termination cap, 13 ft. (4m).
- Refer to Table 21.2 to determine what components must be selected to complete the fireplace installation.
- Determine the number of ceiling firestops, stabilizers, roof flashing, etc. required to complete the fireplace installation.

Table 21.2

HEIGHT OF CHIMNEY COMPONENTS		*in.*	*mm*
Chimney Stabilizer			
	SL3	4-3/4	121
Firestops Spacers			
	FS338	0	0
	FS339	0	0
	FS340	0	0
Offsets/Returns			
	SL315 (15º)	13-3/8	340
	SL330 (30º)	15-1/2	394
Roof Flashing			
	RF370	0	0
	RF371	0	0
Chimney Sections*			
	SL306	4-3/4	121
	SL312	10-3/4	273
	SL318	16-3/4	425
	SL324	22-3/4	578
	SL336	34-3/4	883
	SL348	46-3/4	1187

*** Dimensions reflect effective height.**

WARNING

Asphyxiation Risk.

- Do NOT connect this unit to a chimney flue servicing another appliance.
- Do NOT connect to any air distribution duct or system.

May allow flue gases to enter the house.

C. Using Offsets/Returns

To bypass any overhead obstructions, the chimney may be offset using an offset/return.

An offset and return may be attached together or a chimney section(s) may be used between an offset and return.

Perform the following steps to determine the correct chimney component combination for your particular installation:

WARNING

Fire Risk

DO NOT combine offsets to create an offset greater than 30° from vertical.

- Draft will be restricted.

- Measure how far the chimney needs to be shifted to enable it to avoid the overhead obstacle. See Figure 22.2. Use dimension “A” to determine chimney section required to achieve the needed shift.
- After determining the offset dimension, refer to Table 22.1 and find the “A” dimension closest to but not less than the distance of shift needed for your installation.
- The “B” dimension that coincides with the “A” dimension represents the required vertical clearance that is needed to complete the offset and return.
- Read across the chart and find the number of chimney sections required and the model number of those particular chimney parts.
- Whenever the chimney penetrates a floor/ceiling, a ceiling firestop must be installed.
- The effective height of the fireplace assembly is measured from the base of the fireplace.

Table 22.1

Part SL315		Part SL315		SL306	SL312	SL318	SL324	SL336	SL348
15°		30°							
A	B	A	B						
1-5/8”	13-3/8”	3-7/8”	14-1/2”	-	-	-	-	-	-
2-7/8”	17-3/4”	6-1/4”	18-5/8”	1	-	-	-	-	-
-	-	8-5/8”	22-3/4”	2	-	-	-	-	-
4-1/2”	23-5/8”	9-1/4”	23-3/4”	-	1	-	-	-	-
-	-	11-5/8”	27-7/8”	1	1	-	-	-	-
6”	29-3/8”	12-1/4”	29”	-	-	1	-	-	-
7-1/4”	34”	14-5/8”	33”	-	2	-	-	-	-
-	-	15-1/4”	34-1/8”	-	-	2	1	-	-
-	-	17-5/8”	38-1/4”	1	-	-	1	-	-
-	-	20-5/8”	43-1/2”	-	-	-	-	-	-
10-5/8”	46-3/4”	21-1/4”	44-5/8”	-	-	-	-	1	-
11-7/8”	51-3/8”	23-5/8”	48-3/8”	1	-	-	-	1	-
-	-	26-5/8”	53-7/8”	-	-	-	2	-	-
13-3/4”	58-3/8”	27-1/4”	55-3/4”	-	-	-	-	-	-
15”	63”	29-5/8”	59”	1	-	-	-	-	1
16-1/2”	68-3/4”	32-5/8”	64-1/4”	-	1	-	-	-	1
18”	74-5/8”	35-5/8”	69-1/2”	-	-	1	-	-	1
-	-	38-5/8”	74-5/8”	-	-	-	1	-	1
-	-	41”	78-3/4”	1	-	-	1	-	1
22-3/4”	91-7/8”	44-5/8”	85”	-	-	-	-	1	1
24”	96-1/2”	47”	89-1/8”	1	-	-	-	1	1
25”	103-1/2”	50-5/8”	95-1/2”	-	-	-	-	-	2

Example:

Your “A” dimension from Figure 22.2 is 14 1/2 in. (368 mm). Using Table 22.1 the dimension closest to, but not less than 14 1/2 in. (368 mm) is 14 1/2 in. (368 mm) using a 30° offset/return. It is then determined from the table that you would need 34 1/8 in. (867 mm) (Dimension “B”) between the offset and return. The chimney component that best fits your application is one SL324.

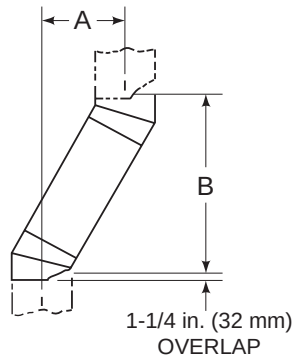


Figure 22.2 Chimney Offset/ Return

D. Assemble the Chimney Sections

Attach either a straight chimney section or an offset to the top of the fireplace (depending on your installation requirement). Chimney sections are locked together by pushing downward until the top section meets the stop bead on the lower section.

The inner flue is placed to the inside of the flue section below it. The outer casing is placed outside the outer casing of the chimney section below it. See Figure 23.1.

If you are using a different approved venting system, follow the instructions that were supplied with that system.

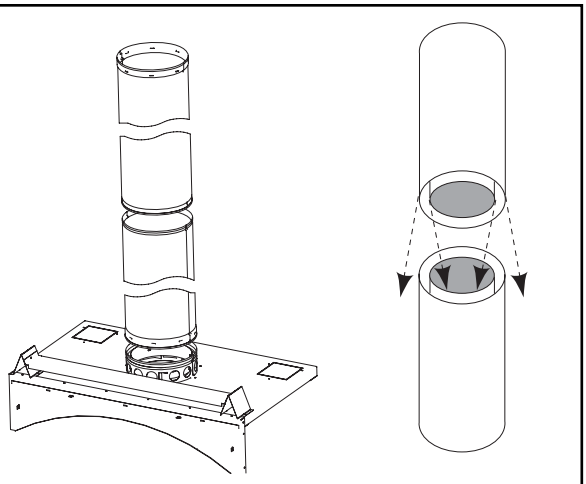


Figure 23.1 Assembling Chimney Sections

Note: Inner flue and outer liner sections cannot be disassembled once locked together. Plan ahead to ensure the proper installation height is achieved with the selected chimney components.

⚠ WARNING

Fire Risk

Do NOT install substitute or damaged chimney components.

- MUST use chimney system described in this manual.
- NO OTHER chimney components may be used.

Substitute or damaged chimney components may impair safe operation.

E. Assembling Chimney Sections for the SL-300 Series

NOTE: Chimney Air Kit, Part CAK4A is REQUIRED when using the SL-300 Pipe Series. Detailed instructions are supplied with the kit.

If using the Dura-Plus System (must be 8 in. (203 mm) in diameter), the starter ring that came with the fireplace must be removed and replaced with the Dura-Plus Base Plate. The CAK4A is not required with a Dura-Plus System.

Installing CAK4A and Flex Pipe

NOTE: FOLLOW DETAILED INSTRUCTIONS THAT COME WITH THE CAK4A.

1. Install the chimney pipe first.
2. Hand bend the tabs in position before placing on the fireplace.
3. Place the box on top of the fireplace around the chimney pipe, push both pieces together and secure with screws provided.
4. Use the pre-punched holes in the tabs as guides and drill holes through the fireplace top.
5. Secure the CAK4A in place.
6. Seal around the kit at the flue and at the top of the can with caulk.

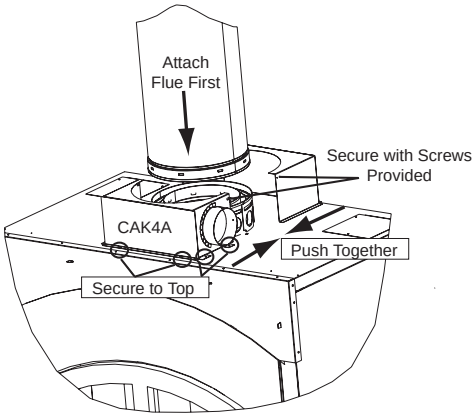


Figure 23.2 Installing the CAK4A

NOTES:

1. The outside air termination cap must be a minimum of 6 ft (1829 mm) above the ground and kept free of debris and must be at least 3 ft (914 mm) below the chimney top, if installed in the chase zone.
2. Seal around the cap and flex with caulk to stop air from getting in to the chase (See Figure 24.1 on page 24).

⚠ WARNING

Fire Risk

- The flex hose must never be compressed or deformed!

Restricting the airflow inside the flex pipe may increase flue pipe temperatures causing a chase fire.

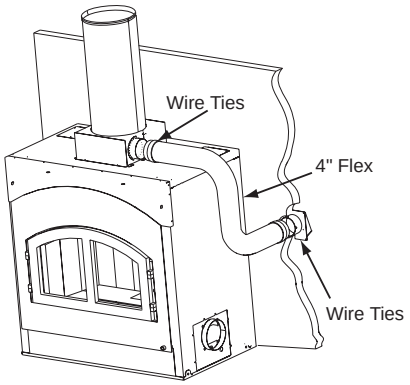


Figure 24.1 Installing Flex Pipe

F. Install the Ceiling Firestops

- Mark and cut an opening in the ceiling for the ceiling firestop being used. See Figure 24.2.
- Frame the opening with the same size lumber used in the ceiling joists.
- Install the firestop spacer.

These firestop spacers are designed to provide the minimum 2 in. (51 mm) air space required around the chimney. In all situations, the firestop spacers are to be nailed to the ceiling joists from the bottom or fireplace side, **EXCEPT** when the space above is an insulated ceiling or attic space. In this situation, the firestop spacer **must** be nailed from the top side to prevent loose insulation from falling into the required 2 in. (51 mm) air space around the chimney.

NOTE: See Figures 25.1 and 25.2 on page 25.

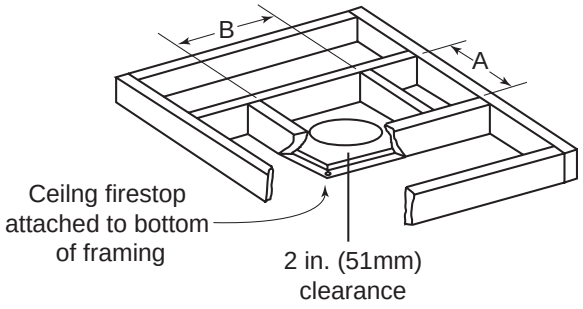
CAUTION

- Ceiling firestops must be used at ceiling/floor.
- Chase construction requires ceiling firestops at each floor or every 10 ft (3.05 m) of clear space.
- Use same dimensional lumber as joists.

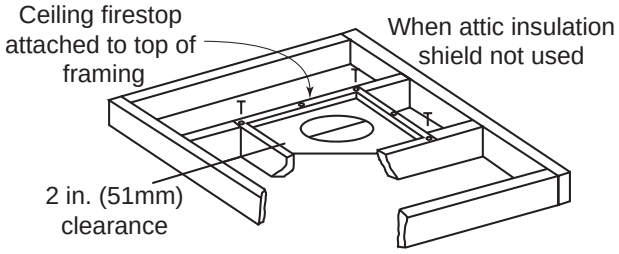
Ceiling firestop slows spread of fire and reduces cold air infiltration.

Note: The ceiling firestop MUST be nailed to the bottom of the ceiling joists EXCEPT when the space above is uninsulated and the attic insulation shield is not being used (see Figure 24.2). When the attic insulation shield is used the ceiling firestop may be above or below the joist of an insulated ceiling.

ROOM ABOVE (non-insulated ceiling)



ATTIC ABOVE (insulated ceiling)



Note: Use same dimensional lumber for framing ceiling firestop and joists.

Catalog #	A		B	
	in.	*mm*	*in.*	*mm*
FS338	14-1/2	368	14-1/2	368
FS339	14-1/2	368	18-3/8	467
FS340	14-1/2	368	23	584

Figure 24.2 Installing the Ceiling Firestop

Note: You must provide support for the pipe during construction and check to be sure inadvertent loading has not dislodged the chimney section from the fireplace or at any chimney joint.

G. Install the Attic Insulation Shield

An insulation shield must be installed when there is a possibility of insulation coming into contact with the factory built chimney system.

- Bend the tabs at the top of the attic insulation shield inward. This will help keep the chimney section centered in the shield.
- Position the shield over the vertical chimney section where it penetrates a ceiling firestop.
- Slide the shield down until it rests on the ceiling firestop. The ceiling firestop will support the insulation shield. See Figures 25.1 and 25.2.

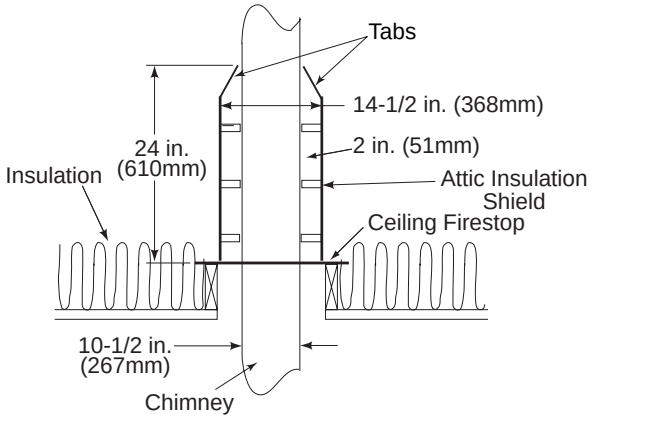


Figure 25.1 Install Attic Insulation Shield Above the Ceiling

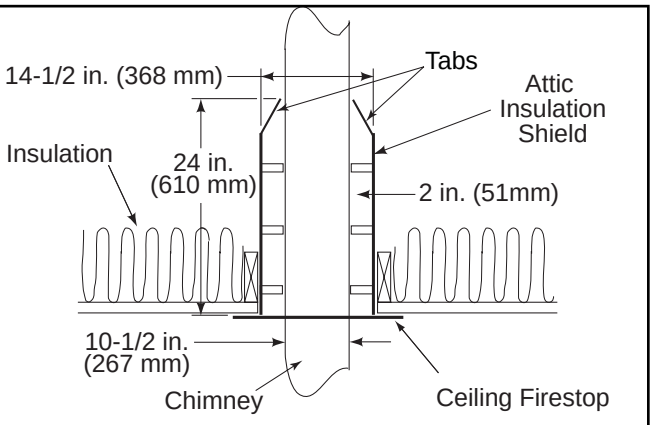


Figure 25.2 Install Attic Insulation Shield Below the Ceiling

WARNING

Fire Risk

- DO NOT pack insulation or other combustibles: between ceiling firestops; between chimney and attic insulation shield.
- ALWAYS maintain specified clearances around chimney and ceiling firestop systems.
- Install ceiling firestops as specified.

Failure to keep insulation or other material away from chimney pipe may cause fire.

H. Double-check the Chimney Assembly

Continue assembling the chimney sections up through the ceiling firestops as needed. While doing so, be aware of the height and unsupported chimney length limitations given under Section 5.A. Chimney Requirements.

Check each section by pulling up slightly from the top to ensure proper engagement before installing the succeeding sections. If they have been connected correctly, they will not disengage when tested.

I. Secure the Chimney

When offsets and returns are joined to straight pipe sections, they must be locked into position with the screws provided* (outer only), using the predrilled holes. To prevent gravity from pulling the chimney sections apart, the returns and the chimney stabilizers have hanger straps for securing these parts to joists or rafters. See Figure 25.3.

* Use #6 or #8 sheet metal screw, or larger, no longer than 1/2 in. (13mm).

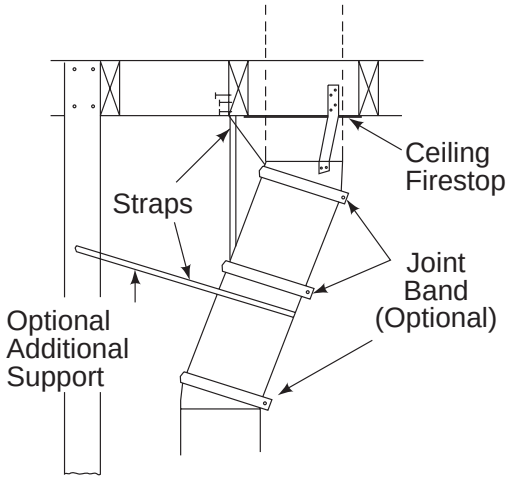


Figure 25.3 Secure the Chimney

WARNING

Fire Risk

- Secure offsets with screws (not to exceed 1/2 in. / 13mm in length).
- Secure returns with strapping.
- Straight chimney sections may be secured with screws (not to exceed 1/2 in./13 mm in length) at the joints.

Keep chimney sections from separating or twisting.

6 Complete the Enclosure

A. Chimney Termination (2-10-03 Rule)

Chimney Termination Requirements (See Figures 26.1 and 26.2)

- Must have a cap approved and listed for this fireplace system
- Must not be located where it will become plugged by snow or other material
- Must terminate at least 3 ft (914 mm) above the roof **and** at least 2 ft (610 mm) above any portion of the roof within 10 ft (3.05 m)
- Must be located away from trees or other structures

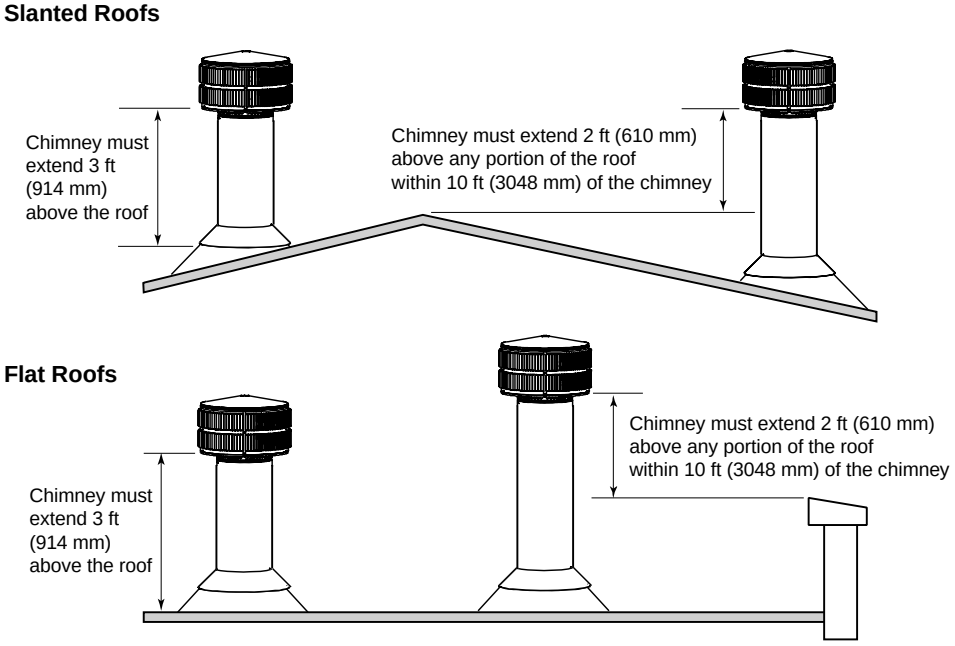
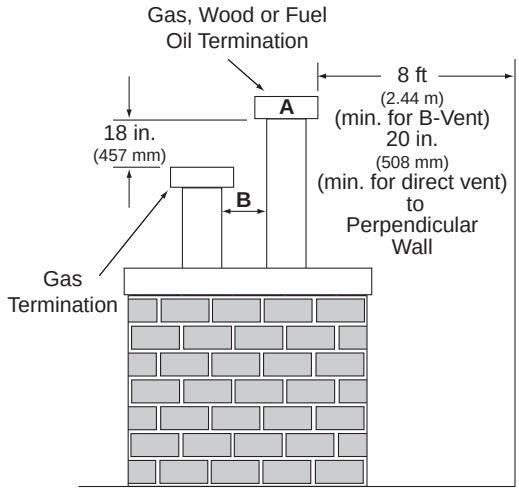

Slanted Roofs
Chimney must extend 3 ft (914 mm) above the roof
Chimney must extend 2 ft (610 mm) above any portion of the roof within 10 ft (3048 mm) of the chimney
Flat Roofs
Chimney must extend 3 ft (914 mm) above the roof
Chimney must extend 2 ft (610 mm) above any portion of the roof within 10 ft (3048 mm) of the chimney

Figure 26.1 Termination Requirements


Gas, Wood or Fuel Oil Termination
8 ft (2.44 m) (min. for B-Vent)
20 in. (508 mm) (min. for direct vent) to Perpendicular Wall
A
18 in. (457 mm)
B
Gas Termination

Termination Caps Staggered Height

A	Gas Termination	Wood or Fuel Oil Termination
B	6 in. (152 mm) min.	20 in. (508 mm) min.

Figure 26.2 Multiple Chimneys

NOTE: Wiring for blowers must be done before framed enclosure is completed. If using a Heat Zone kit, it also must be installed before enclosure is complete.

- **Mark the Exit Point of the Roof**

  Locate the point where the chimney will exit the roof by plumbing down to the center of the chimney. Drive a nail up through the roof to mark the center. See Figure 27.1.

- **Cut Out the Hole in the Roof**

  Measure to either side of the nail and mark the 14-1/2 in. x 14-1/2 in. (368 mm x 368 mm) opening required. This is measured on the horizontal; actual length may be larger depending on the pitch of the roof. Cut out and frame the opening. See **Chapter 25** of the **Uniform Building Code** for roof framing details.

⚠ WARNING

Fire Risk

- Must maintain 2 in. (51 mm) air clearance to insulation and other combustible materials.

- **Assemble the Chimney Sections Through the Roof**

  Continue to add chimney sections through the roof opening, maintaining at least a 2 in. (51 mm) air space to combustible materials.

- **Install the Roof Flashing**

  If a roof flashing is to be used, install the roof flashing appropriate to the roof pitch and install a termination cap and storm collar following the instructions shipped with the cap.

  For chase installations you can use a round termination cap, a round telescoping termination cap or a square termination cap (See pages 61-62). A chase installation must use a chase top. Chase tops are available from your dealer. See page 14 for building a chase.

- **Install the Chimney Air Kit (required in Canada):**

  When installing the chimney air kit, follow the instructions provided with this accessory. See page 23.

- **Completion of the Enclosure**

  Complete the fireplace enclosure, allowing space for outside air ducts. Electrical wiring should not come in contact with the fireplace. **A minimum clearance of 1/2 in. (13 mm) must be maintained between the fireplace back and 1 in. (25 mm) minimum clearances to sides and the enclosure.**

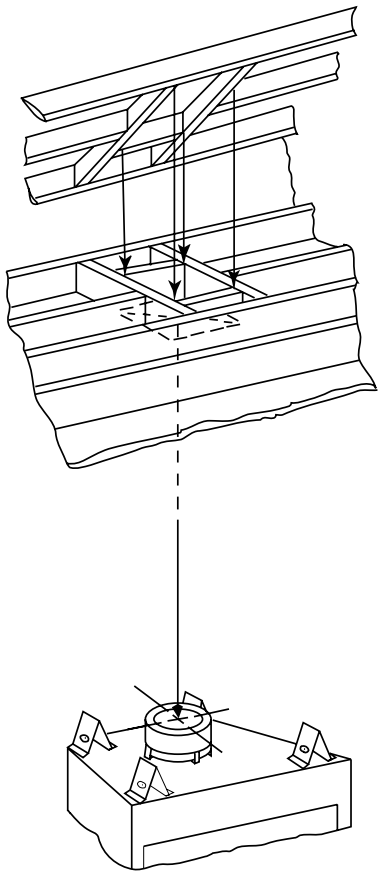


Figure 27.1 Ceiling/Attic Construction

B. SL-300 Series Ceiling/Roof Thimble

NOTE: REQUIRED for manufactured homes with vaulted ceilings.

1. Locate the point where the chimney will exit the roof by plumbing down to the center of the chimney. Lay out, cut and frame a 14-1/2 in. (368 mm) square opening (measured on the horizontal) through the ceiling and roof structure. ***Consult local codes for framing details.***

2. The thimble must extend completely through the roof structure shielding combustible materials. Five location holes have been provided to allow for a variety of ceiling/roof thicknesses. A Thimble Extension is required when the ceiling/roof thickness exceeds 12-1/2 in. (318 mm). The extension should overlap the thimble one inch.

3. To attach the extension to the thimble, drill 1/8 in. (3 mm) holes through the outer shield of the thimble using the predrilled holes in the extension as guides. Attach the extension to the thimble using the screws provided with the extension.

4. Install the thimble assembly and nail it securely to the framing members.

5. Center the flashing over the chimney and nail it to the roof using the *Stormguard* nails provided. Keep gaps between the flashing plate and the roof to a minimum. Caulk the flashing plate and roof junction as well as the vertical seam on the flashing. All nail heads must be caulked with a roofing sealant.

6. Finish assembling the chimney storm collar and termination cap following the installation instructions provided with them.

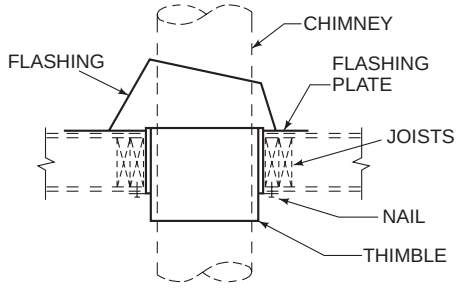


Figure 28.1 Installing Part: 12966A, Configuration 1

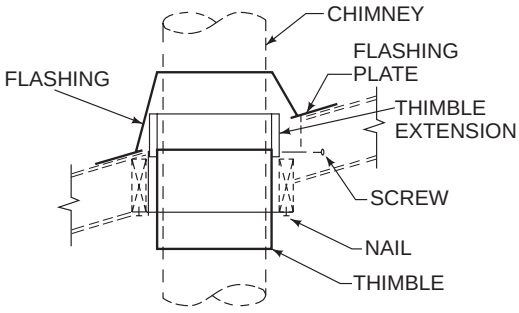


Figure 28.2 Installing Part 12966A, Configuration 2

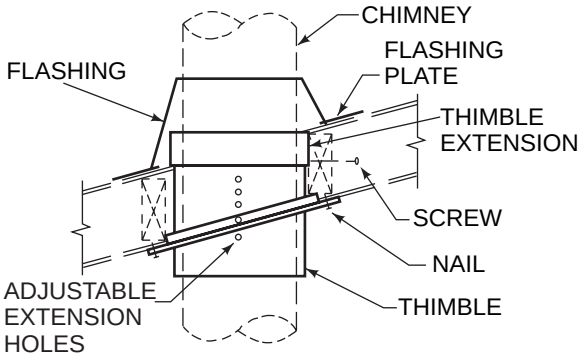


Figure 28.3 Installing Part 12966A Configuration 3

C. Chase Top

A metal chase top is required to seal the top of the chase around the chimney pipe. The top should include a turn-down and drip edge to prevent water from seeping into the chase. Provide a 1/8 in. (3 mm) gap around the flue pipe and slope the top downward away from the penetration. See Figure 29.1.

- All seams must be caulked to prevent leaks.
- A chase installation must use a chase top. Chase tops are available from your Quadra-Fire dealer or may be field constructed.
- Attach the chase top to the top of the chase.

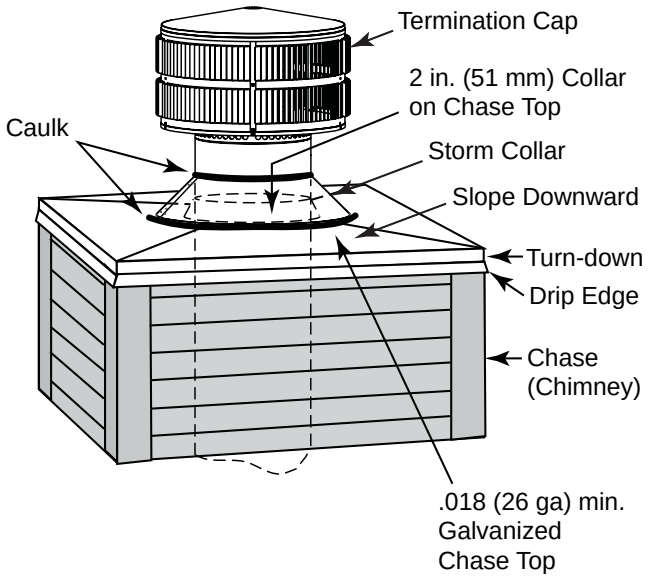


Figure 29.1 Chase Top Construction

• Chase Top Framing

Framing to top of chase must be constructed to support service persons, snow load, etc. Maintain 2 in. (51 mm) clearance to combustibles. Top of framing should be sheeted with plywood particle board. See Figure 29.2.

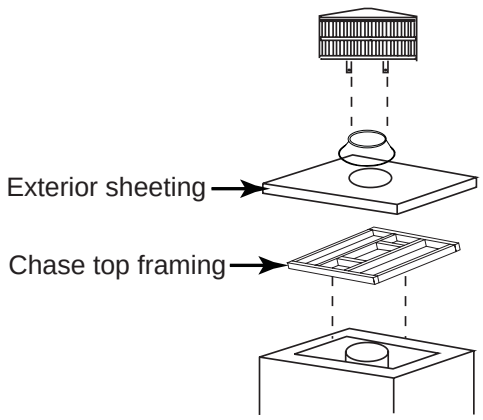


Figure 29.2

WARNING

Fire Risk

- Never install a single wall slip section or smoke-pipe in a chase structure.

The higher temperature of this single wall pipe may radiate sufficient heat to combustible chase materials to cause a fire.

D. Install the Termination Cap

Note: To protect against the effect of corrosion on those parts exposed to the weather, the termination cap can be painted with a rust-resistant paint.

WARNING

Fire Risk

- The minimum overlap of cap to pipe MUST be met or chimney may separate from cap.

Separation allows sparks, heat and embers to escape.

- Install the chimney sections up through the chase enclosure. When using a Round Termination Cap, the uppermost top section of pipe must extend 6 in. (152 mm) above the top of the flashing collar to allow installation of the storm collar and termination cap. See Figure 29.3.

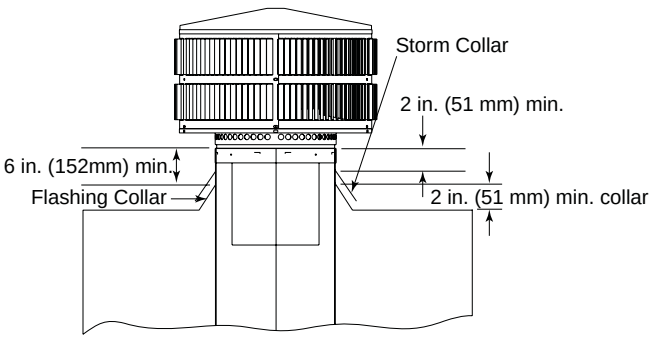


Figure 29.3 Installing a TR344 Round Termination Cap

- For installations utilizing a Round Telescoping Termination Cap, the uppermost chimney section must be below the top of the chase top, but not more than 14-1/2 in. (368 mm) below the top of the chase top. Minimum overlap of chimney and termination cap must be 1-1/2 in. (38 mm). See Figure 30.1 on page 30.

- For installations utilizing a Round Telescoping Termination Cap, the uppermost chimney section must be below the top of the chase top, but not more than 14-1/2 in. (368 mm) below the top of the chase top. Minimum overlap of chimney and termination cap must be 1-1/2 in. (38 mm). See Figure 30.1.

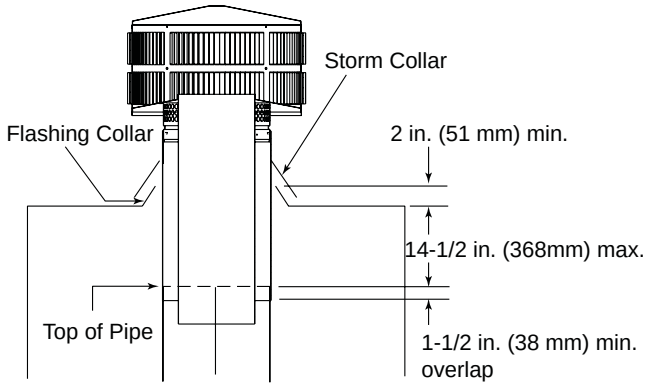


Figure 30.1 Installing a TR342 Round Telescoping Termination Cap

NOTE: TR342/TR344: For less air restriction to flue gases, use top vent kit listed in Section 12.

- For installations utilizing an ST375 Square Termination Cap the last chimney section must not be more than 4-1/2 in. (114 mm) below the chase top. See Figure 30.2.

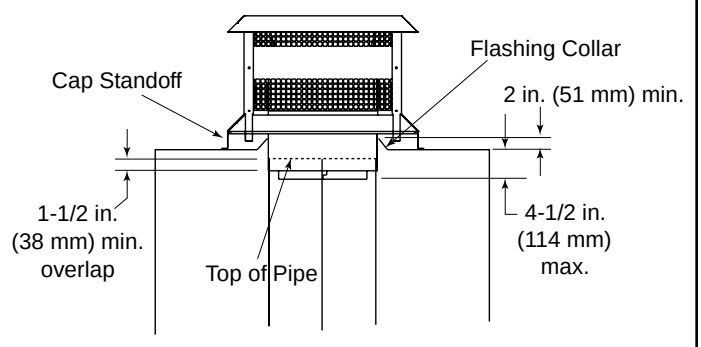


Figure 30.2 Installing an ST375 Square Termination Cap

- For installations utilizing a TS345/TS345P Square Termination Cap, the uppermost chimney section must not be more than 3 in. (76 mm) below the chase top. See Figure 30.3.

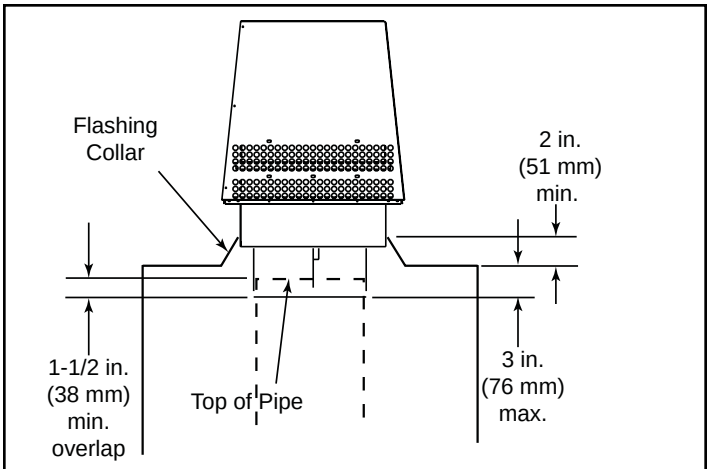


Figure 30.3 Installing a TS345/TS345P Square Termination Cap

- For chase installations you can use a Round Termination Cap, a Round Telescoping Termination Cap, or a Square Termination Cap.
- Install termination caps following instructions provided with them.

7 Accessories

A. Blower Replacement

Blower Cord Location

The 7100FP Fireplace comes standard equipped with two blowers, installed at the factory with electric access on the right side of fireplace (as you face it).

CAUTION

Shock Risk

Disconnect power by turning off circuit breaker **BEFORE** servicing.

Blower Replacement Instructions

1. Remove the brick from the bottom of the fireplace and 3 of the back vertical bricks.
2. Remove the 2 screws from the access panel in the fire-box floor. See Figure 31.1.
3. Pry up the access panel using the screwdriver slot and completely remove the panel.

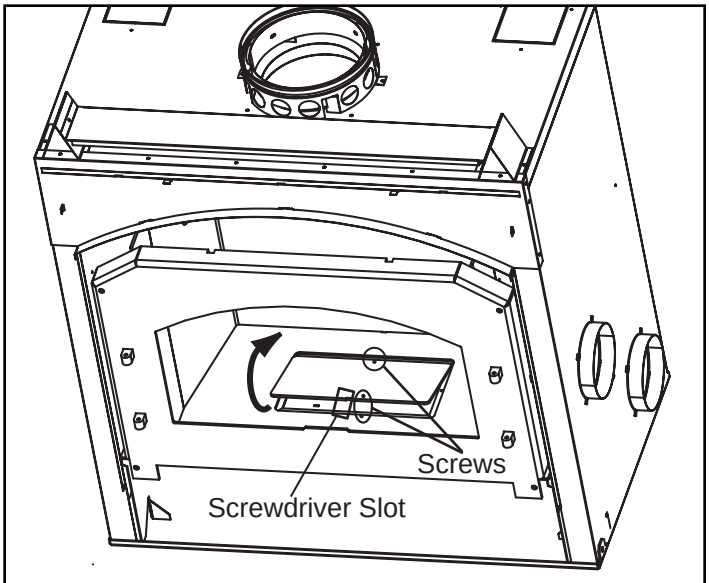


Figure 31.1 Accessing Blower Motor

Removing the Blower

1. Unplug the wire harness.
2. Lift blower from locating pins and remove. Repeat for second blower if necessary. See Figure 31.2.

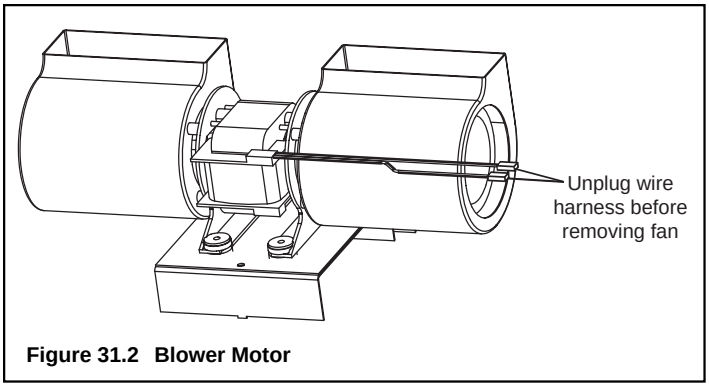


Figure 31.2 Blower Motor

3. Connect new blower wires to wire harness.
4. Before installing the blower, make sure the grommets are tightly in place. Insert the right blower and place over the 2 locating pins. Repeat for other blower. Figure 31.3.

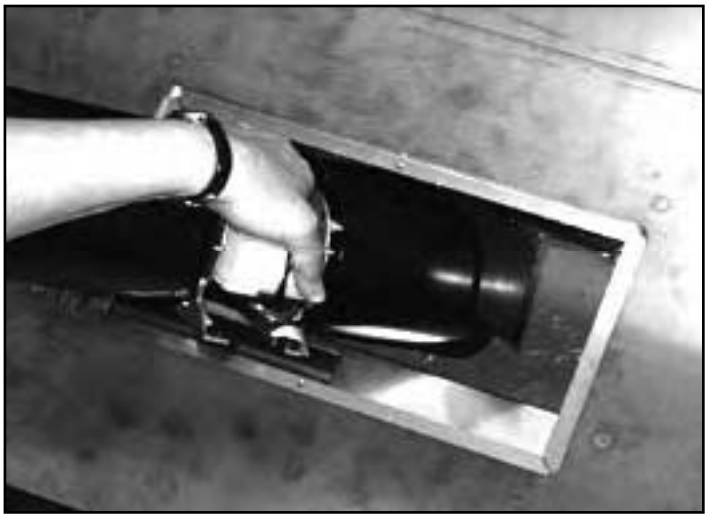


Figure 31.3 Installing Blowers

5. Re-install bottom panel or firebox access panel in reverse order as described above.
6 Replace the brick that was removed.
7. Reconnect the power.

B. Baffle Removal and Installation

1. Remove all ash from firebox, and extinguish all hot embers before disposal into a metal container.
2. Remove the baffle protection channel by turning it down and pulling it out of the firebox. See Figure 32.1.

Figure 32.1 Removing Baffle Protection Channel

3. Remove ceramic blanket from above the baffle.
4. With a 3/16 in. Allen wrench, remove the front manifold tube retainer bolt on the air channel under the end of the front tube. See Figure 32.2.

Figure 32.2 Removing Manifold Tube

NOTE: Soak the bolt with penetrating oil for at least 15 minutes before trying to remove it.

5. To remove manifold tube, slide the tube to one side until one end is out of its hole. Then, while lifting that end of the fiber board baffle, pull tube up over the air channel and out of hole at the other end. It is only necessary to remove the first tube in order to remove the baffle.
6. Slide fiber board baffle forward to front of fireplace and straight out through door. See Figure 32.3.
7. To install the fiber board baffle, repeat steps 2 through 4 in reverse. Be sure the fiber board baffle and ceramic blanket are pushed back fully and the blanket is down and flat.

Figure 32.3 Removing Baffle *(shown without ceramic blanket)*

C. Door and Door Gasket

Periodically check the door gasket for proper seal. As the gasket compresses or “seats” during use, it may become necessary to adjust or tighten the door latch.

<u>To Adjust or Tighten Door Latch</u>

Remove spacing washers shown in Figure 32.4. At least one spacing washer and the black washer must be left in place.

OR

Replace the gasket material. Wear or damage to the gasket material can cause air leakage into the firebox resulting in overfiring and loss of efficiency.

A replacement gasket is available from your dealer.

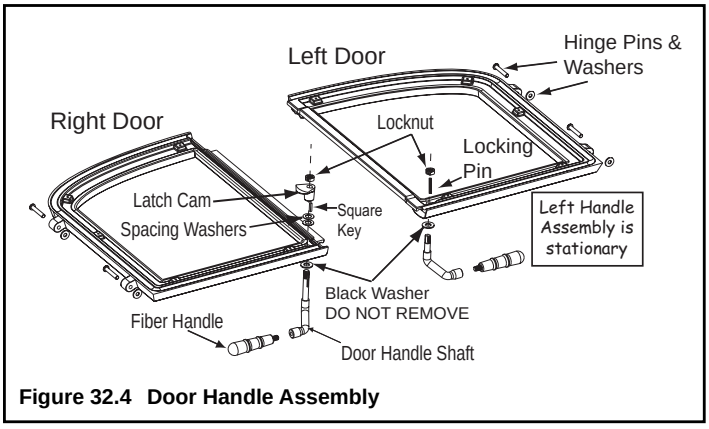


Figure 32.4 Door Handle Assembly

D. Heat Zone Kit

This kit is tested and safe when installed in accordance with this installation manual. It is your responsibility to read all instructions before starting installation and to follow these instructions carefully during installations.

Installation of this kit **MUST** by performed by a qualified service technician.

The Heat-Zone-Wood kit is carefully engineered and must be installed only as specified. If you modify it or any of its components you will void the warranty and you may possibly cause a fire hazard. Installation must be done according to applicable local, state, provincial and/or national codes.

Plan the location of the fireplace and warm air duct run(s).

CAUTION

ALL wiring should be done by a qualified electrician and shall be in compliance with local codes and with the National Electric Code NFPA/NEC No. 70-current (in the United States), or with the current CSC22.1 Canadian Electric Code (in Canada).

DUCT RUN REQUIREMENTS

MAXIMUM Duct Run = 40 ft. (12m)
MINIMUM Duct Run = 36 in. (914mm)

DUCTING MATERIAL

6 in. (152mm) B-Vent Only
DO NOT DUCT into existing furnace plenum

MINIMUM CLEARANCE TO COMBUSTIBLES

1 in. (25mm) from the B-Vent
1/2 in. (13mm) from top & bottom of outlet box
0 in. (0mm) from the sides of outlet box
12 in. (305mm) from wall register to ceiling*
*(See Figure 33.1).

Possible Air Duct Runs / Locations

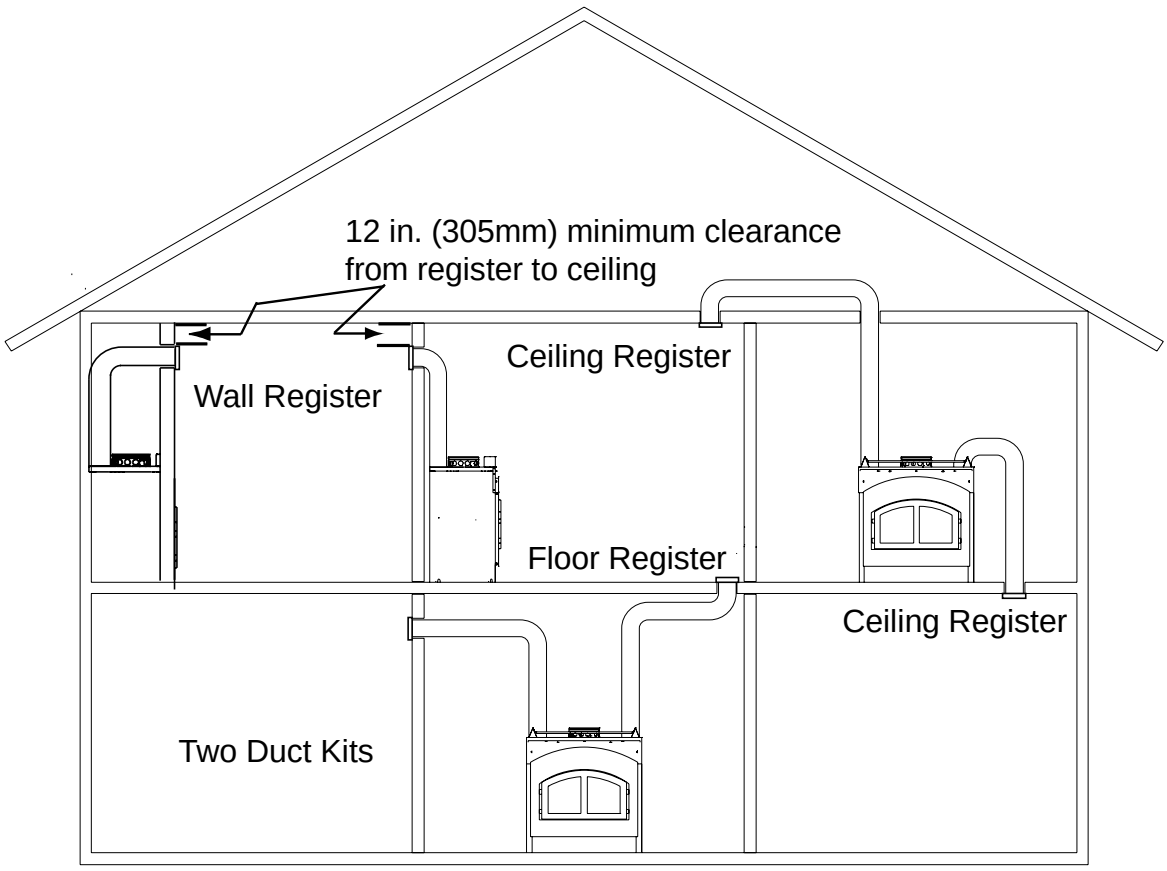


Figure 33.1 Minimum Clearances to Combustibles

INSTALLATION

1. Remove the knockout or cover plate from the top of the fireplace and discard it. See Figure 34.1.

2. Cut a 3 in. (76mm) hole in the insulation board as per the dimensions shown in Figure 34.1.

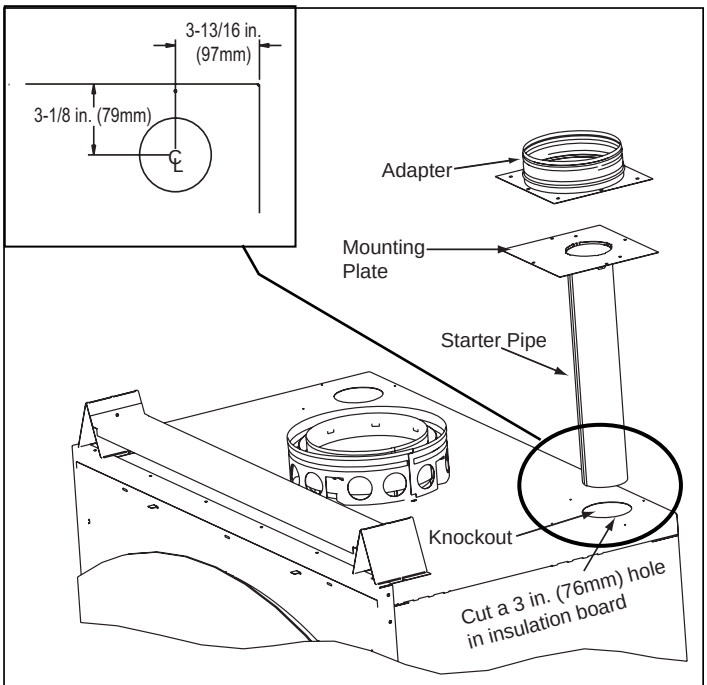


Figure 34.1

3. Determine the necessary length of starter pipe from the following table and cut as required. See Figure 34.2.

4. The starter pipe is shipped flat. After cutting to the required length, manually roll the pipe together and snap lock into place. **NOTE: It is important the pipe length be adhered to or it will affect the performance of your fireplace.**

Run Length	Cut Pipe
20 - 40 ft (6-12m)	**2 in. (51mm)***
**A minimum of 2 in. (51mm) pipe must be used to cover the raw insulation to prevent it tfrom blowing out through the Return Air Grille.*	
10 - 20 ft (3 - 6m)	**8 in. (203mm)**
3 - 10 ft (1 - 3m)	**No cut needed****
***Use full 16 in. (406mm) as supplied*	

Figure 34.2

5. On the Mounting Plate, hand bend the tabs downward. Slide the tabs over the outside of the starter pipe. Secure with 4 sheet metal screws included in fasteners package. Figure 34.3.

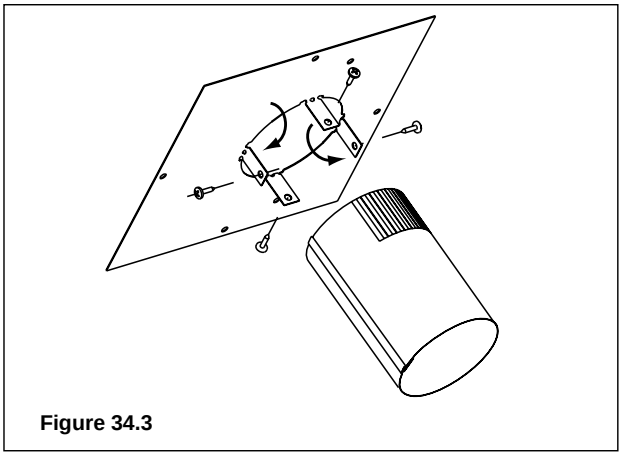


Figure 34.3

6. Slide the starter pipe into the fireplace, matching the holes in the plate to the holes in the fireplace.

7. Place the Adapter on the Mounting Plate lining up holes. Using the 4 sheet metal screws included in the kit, secure the Adapter and Mounting Plate into fireplace. After securing to the fireplace, tape down the Adapter edges to the top of the fireplace with aluminum tape to prevent leakage.

8. Determine the location for the air register and fan housing assembly. Cut a 7-5/8 in. x 13-5/8 in. (143 x 346mm) hole between framing members (wall studs or floor joists). The brackets can be rotated 180° and mounted to the back side of the 2 x 4 if necessary. See Figure 35.2 on page 35.

NOTE: The fan and electrical connections must be accessible for servicing per local code requirements.

NOTE: If the fan housing is installed in a 2 x 4 wall, the front of the housing will protrude approximately 1/4 in. (6mm) from the finished wall. See Figure 35.1 on page 35.

⚠ WARNING

Fire Risk
Comply with all minimum clearances specified.

- A minimum 1/2 in. (13mm) air clearance must be maintained at the back and 1 in. (25mm) to the sides of the fireplace assembly.

9. Attach enough 6 in. (152mm) B-Vent as required for your installation to the fan housing. **A maximum of (4) 90° elbows is recommended.** Securely twist lock the B-Vent to the Adapter.

Also screw the B-Vent to the outlet box on the fan housing. See Figure 35.2 on page 35. Support duct at intervals of no greater than 4 ft (1 m) as required by local code.

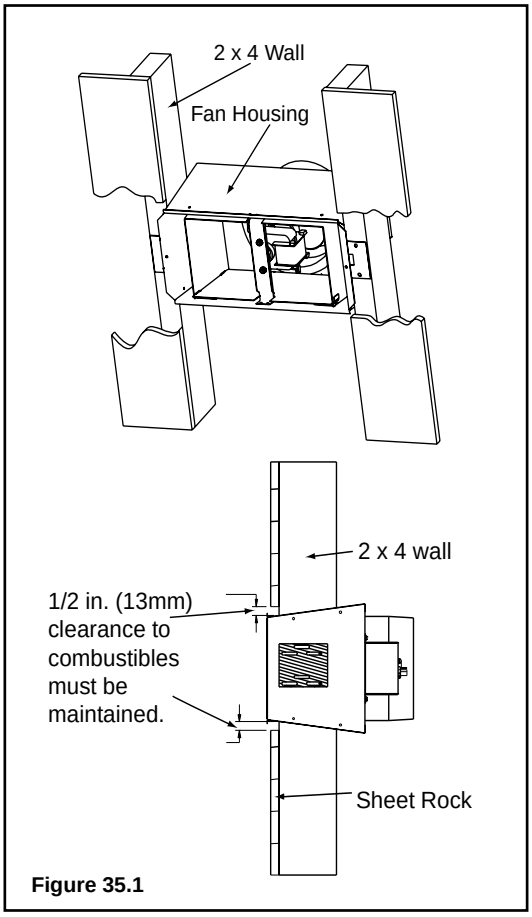


Figure 35.1

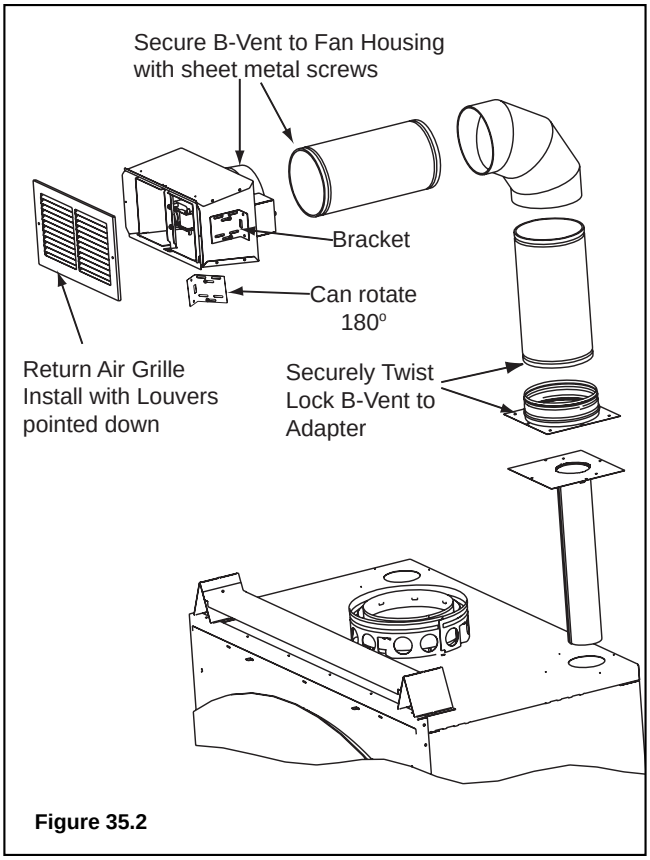

Secure B-Vent to Fan Housing with sheet metal screws
Bracket
Can rotate 180º
Return Air Grille Install with Louvers pointed down
Securely Twist Lock B-Vent to Adapter

Figure 35.2

NOTE: Secure the duct so that clearance to the fireplace outer wrap is maintained. <u>Tape all seams with aluminum tape 1-1/4 in. (32mm) minimum width or as specified by local codes.)</u>

10. Seal all the way around the inside of the Return Air Grille to prevent hot air being drawn back into the venting system using gasketing supplied with the kit. Leave 1/4 in. (6mm) clearance from all 4 outer edges. Trim excess gasketing. See Figure 35.3.

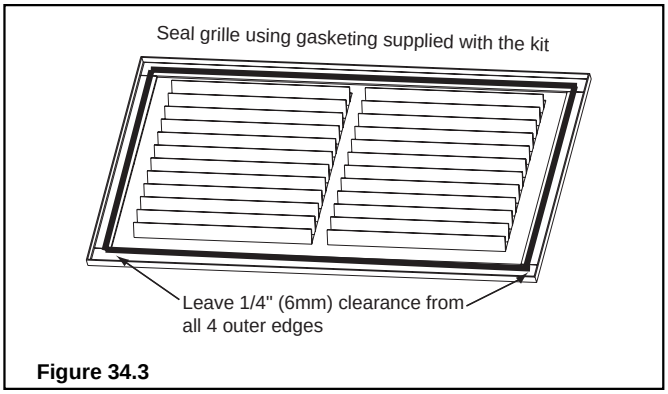


Figure 34.3

11. Install the variable speed wall rheostat (with setting on "OFF") in a convenient location. This switch will control the Heat-Zone fan operation.

12. Remove the Junction Box. Wire 110 VAC service TO the wall rheostat and FROM the wall rheostat to the fan Junction Box. Use wire nuts to secure the 110 VAC service wires to the hot (black) and neutral (white) fan wires and screw the 110 VAC ground wire to the Junction Box. See Figure 35.4.

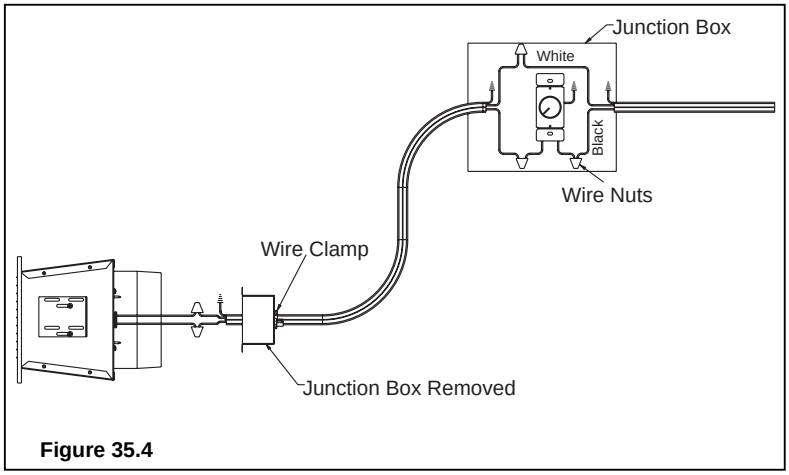


Figure 35.4

13. Secure the Return Air Grille to the fan housing making sure it is flush. The grille must be installed with the louvers pointing down.

<u>NOTE: DO NOT USE ADJUSTABLE REGISTERS.</u>

14. Complete the fireplace installations as per the instructions found in your Owner's Manual.

E. Timer Assembly Replacement

CAUTION

Shock Risk

Disconnect power by turning off circuit breaker **BEFORE** servicing.

1. Remove both doors, fascia and brick.
2. Remove 2 Phillips head screws and pry open access door in the bottom of the fireplace with a flat head screwdriver. Figure 36.1.

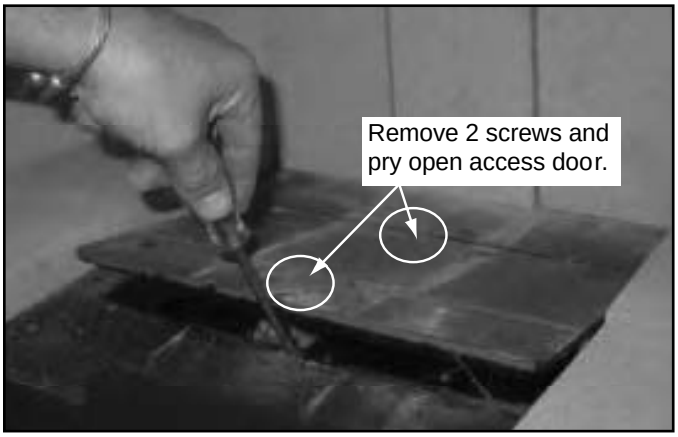


Figure 36.1 Open Access Door

3. Remove 2 screws and take off access cover. Figure 36.2.

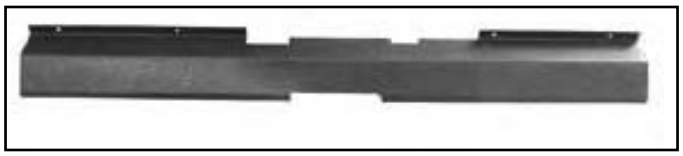


Figure 36.2 Access Cover

NOTE: The timer assembly included in this kit comes with the air chamber cover attached. Figure 36.3.

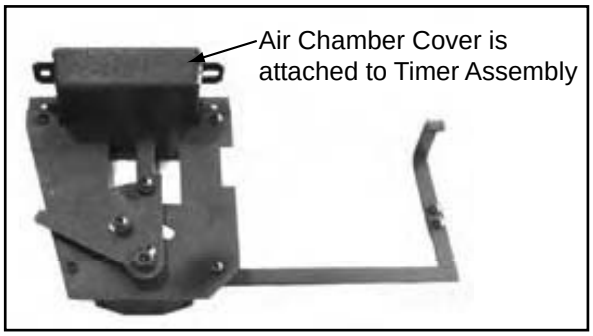


Figure 36.3 Timer Assembly with Air Chamber Cover (Linkage arm is not included in the kit)

4. You will need to disconnect air chamber cover from timer assembly before installing in the fireplace. Set screws aside for later use. Figure 36.4.

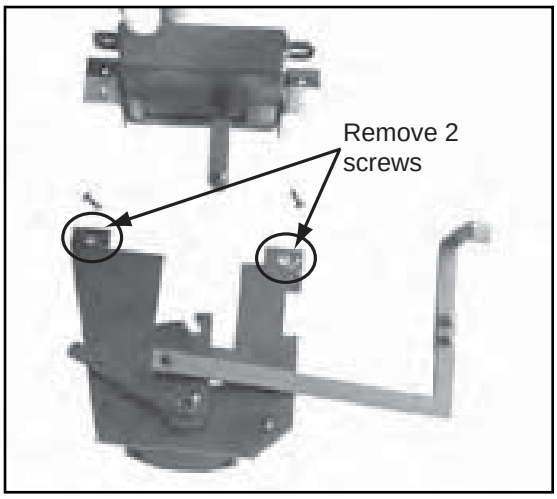


Figure 36.4

Figure 36.5

5. Remove 2 screws from timer linkage upper arm. Be careful NOT TO DROP arm in bottom of fireplace. Figure 36.6.

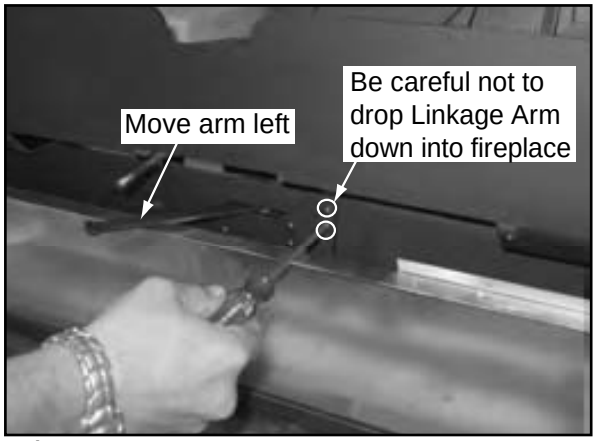


Figure 36.6

6. Remove 2 screws from timer mounting plate. Figure 37.1.

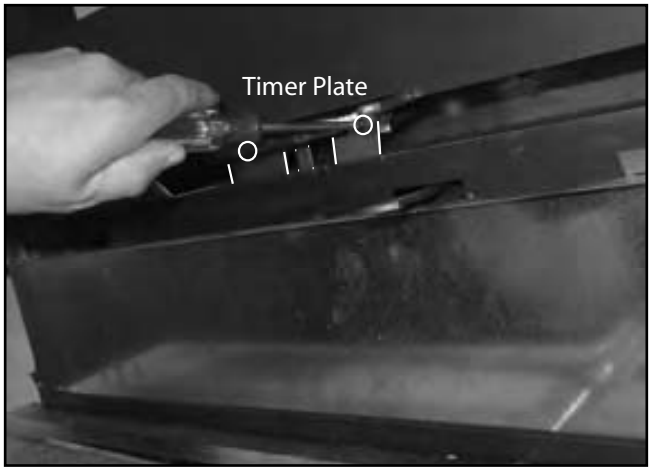


Figure 37.1

7. Place your hand into the access door in the floor of the fireplace. Let the timer assembly and plate drop down and rotate it up through the access door. You will be looking at the back side of the assembly. Figures 37.2 & 37.3.

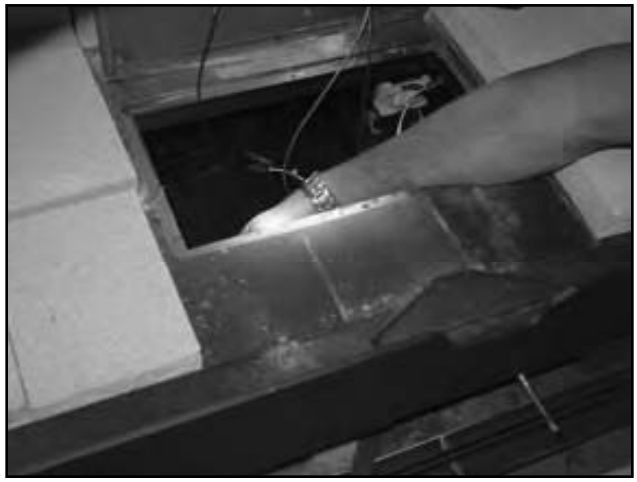


Figure 37.2

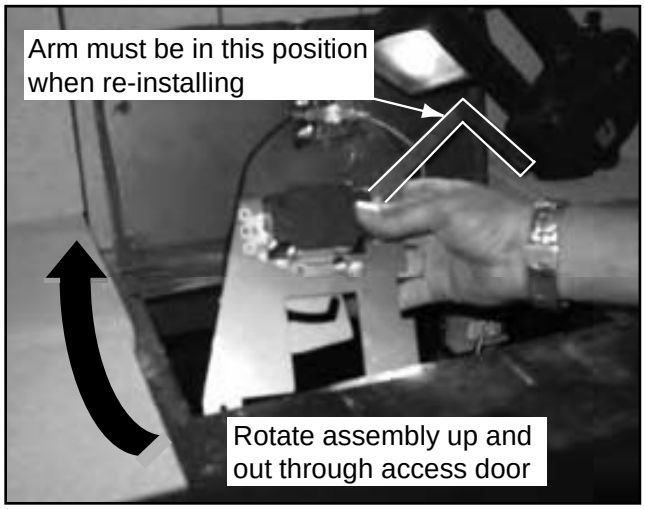


Figure 37.3

8. Remove old air chamber cover. Place the cover under the bottom of the firebox. Using a 7/16 wrench attach the (2) 1/4-20 bolts as shown in Figure 37.4.

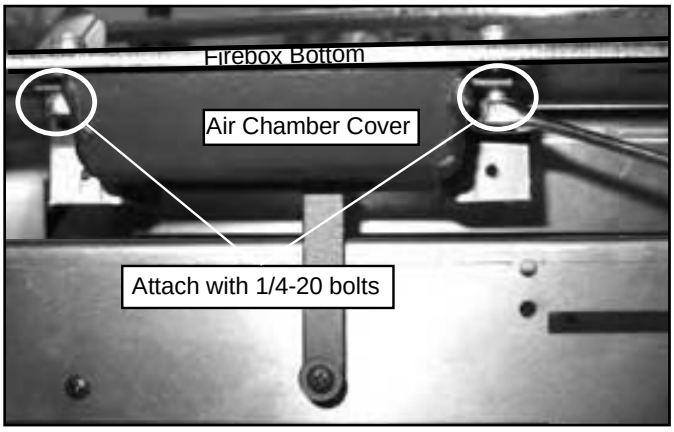


Figure 37.4

9. Insert the new timer assembly into the access door with the back side towards you. Please note the correct postion of the linkage lower arm in Figure 37.3.

10. After re-installing the timer assembly through the firebox access door, re-attach the timer assembly to the air chamber cover using a Phillips head screw driver. Figure 37.5.

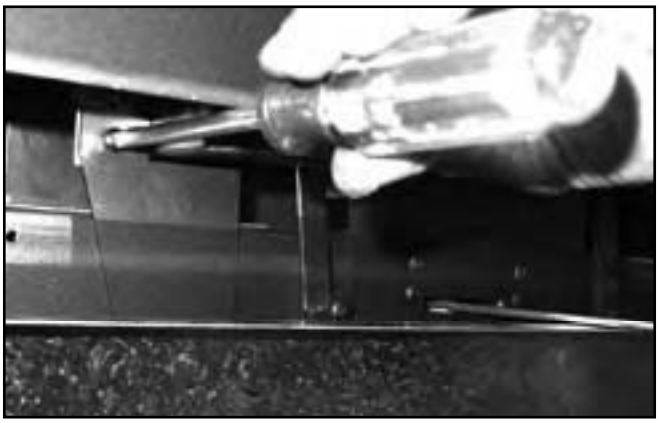


Figure 37.5

11. Attach the linkage upper arm to the lower linkage arm. Figure 36.6 on page 36.

8 Finishing

A. Hearth Extension

A hearth extension must be installed with all fireplaces to protect the combustible floor in front of the fireplace from both radiant heat and sparks. See Figures 38.1 below, and Figures 39.1 and 39.2 on page 39.

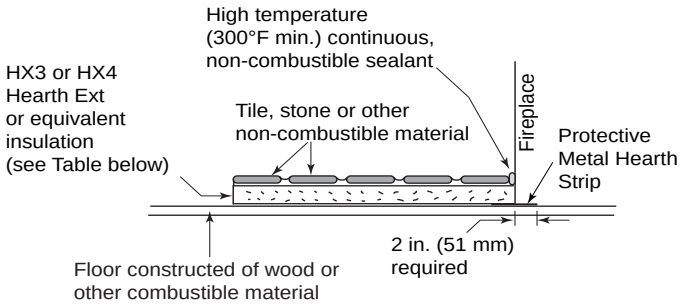


Figure 38.1 Hearth Extension Construction

WARNING

Fire Risk

- Maintain clearances.
- Use only non-combustible material below standoffs, material such as cement board is acceptable.
- Framing or finishing material used on the front of, or in front of, the appliance closer than the minimums listed, must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.).

B. Calculating Alternate Floor Protection Material

Thermal Conductivity: k value

The k value indicates the amount of heat (in BTU's) that will flow in 1 hour through 1 square foot of a uniform material 1 inch thick for each degree (F) of temperature difference from one side of the material to the other. The LOWER the k factor means less heat is being conducted through the non-combustible material to the combustible material beneath it. The k value of a material must be equal or smaller then the required k value to be acceptable.

$$\frac{(BTU)\ (inch)}{(foot^2)\ (hour)\ (^oF)}$$

Thermal Resistance: R value

The R value is a measure of a material's resistance to heat transfer. R value is convenient when more than one material is used since you can add the R values together, whereas you can not do this for k value. The HIGHER the R factor means less heat is being conducted through the non-combustible material to the combustible material beneath it. The R value of a material must be equal or larger then the required R value to be acceptable.

Converting k to R:

Divide 1 by k and multiply the results times the thickness in inches of the material.

R = 1/k x inches of thickness

Converting R to k:

Divide the inches of thickness by R.

k = inches of thickness/R

Calculations:

Example: Floor protection requires k value of 0.84 and 3/4 inch thick.

Alternative material has a k value of 0.6 and is 3/4 inch thick.

Divide 0.6 by .75 = k value of 0.80. This k value is smaller than 0.84 and therefore is acceptable.

Table 38.2

Hearth Extension Insulation Alternatives, R Value = 1.16			
Material	**k per inch thick**	**R per inch thick**	**Minimum thickness required**
Hearth & Home HX3, HX4	0.49	2.18	1 in.
USG Micore 300™	0.49	2.18	1 in.
USG Durock™ Cement Board	1.92	0.52	2-1/4 in.
Cement Mortor	5.0	0.20	5-7/8 in.
Common Brick	5.0	0.20	5-7/8 in.
Ceramic Tile	12.50	0.08	14-5/8 in.
Armstrong™ Privacy Guard Plus	0.046	2.18	1/2 in.
Marble	14.3-20.0	0.07-0.05	16-5/8 in. - 23-3/8 in.

WARNING

Fire Risk

- Metal hearth strips MUST be installed.

Sparks or embers may ignite flooring.

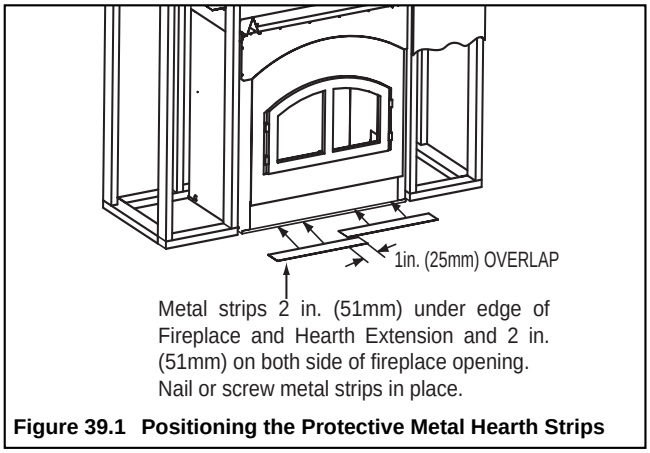

1in. (25mm) OVERLAP
Metal strips 2 in. (51mm) under edge of Fireplace and Hearth Extension and 2 in. (51mm) on both side of fireplace opening. Nail or screw metal strips in place.

Figure 39.1 Positioning the Protective Metal Hearth Strips

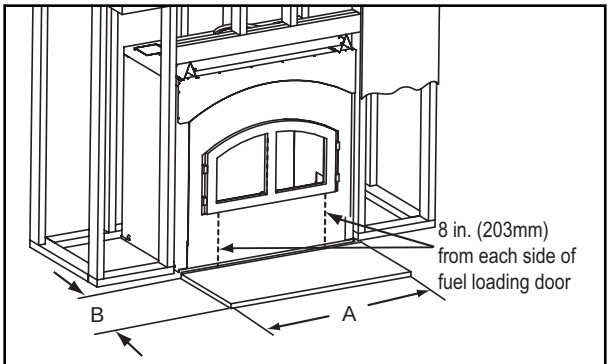
The construction of, and materials used for a hearth extension are shown in Figures 39.2 and 39.3. A hearth extension of this construction may be covered with any non-combustible decorative material and may have a maximum thickness as per Figure 38.1 on page 38. Seal gaps between the hearth extension and the front of the fireplace with a bead of non-combustible sealant.

WARNING

Fire Risk

- Hearth extensions must be installed exactly as specified.

High temperatures or hot embers may ignite concealed combustibles.



Model # 7100FP		A	B
	in.	41	20
	mm	1041	508

Figure 39.2 Hearth Extension Dimensions

1. Fireplace and Hearth Extension are flush on the floor:

Non-combustible flooring 20 in. (508mm) in front of and 8 in. (203mm) to either side of the fuel opening with a minimum thickness of 1 in. (25mm) and ("k" value = 0.49). See Figure 39.2 and 39.3 and Figures 40.1 and 40.2 on page 40.

2. Fireplace is installed flush on the floor and Hearth Extension is raised to the bottom of the fascia:

Raised hearth must be constructed of non-combustible materials such as cement block or equivalent material. Non-combustible flooring on the raised hearth must be 20 in. (508 mm) in front of and 8 in. (203 mm) to either side of the fuel opening with a minimum thickness of 1 in. (25 mm) and ("k" value = 0.49). See Figure 40.3 on page 40.

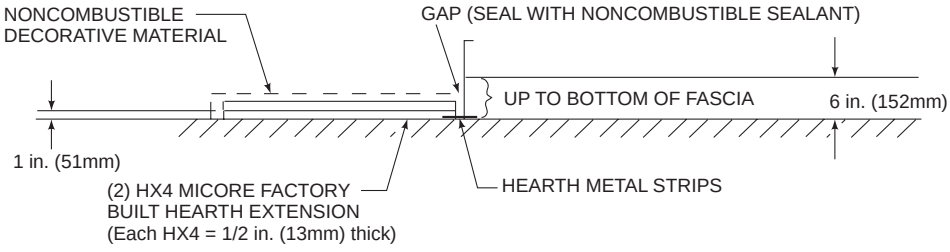

NONCOMBUSTIBLE DECORATIVE MATERIAL
GAP (SEAL WITH NONCOMBUSTIBLE SEALANT)
UP TO BOTTOM OF FASCIA
6 in. (152mm)
1 in. (51mm)
(2) HX4 MICORE FACTORY BUILT HEARTH EXTENSION (Each HX4 = 1/2 in. (13mm) thick)
HEARTH METAL STRIPS

Figure 39.3 Side View of Factory Built Hearth Extension

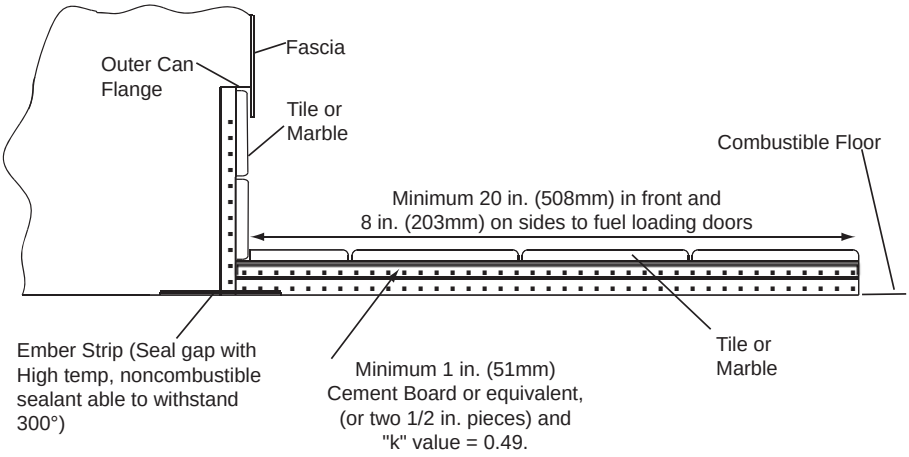

Fascia
Outer Can Flange
Tile or Marble
Combustible Floor
Minimum 20 in. (508mm) in front and 8 in. (203mm) on sides to fuel loading doors
Ember Strip (Seal gap with High temp, noncombustible sealant able to withstand 300°)
Minimum 1 in. (51mm) Cement Board or equivalent, (or two 1/2 in. pieces) and "k" value = 0.49.
Tile or Marble

Figure 40.1 Fireplace and Hearth Extension Flush on the Floor.

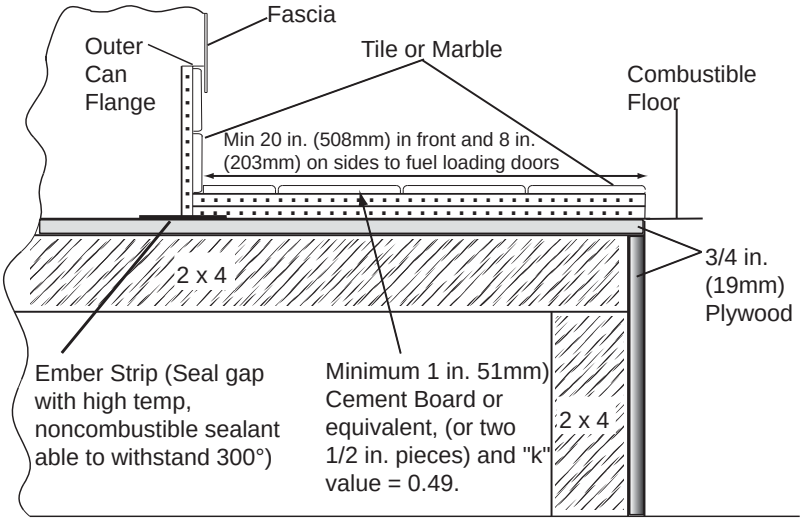

Fascia
Outer Can Flange
Tile or Marble
Combustible Floor
Min 20 in. (508mm) in front and 8 in. (203mm) on sides to fuel loading doors
2 x 4
3/4 in. (19mm) Plywood
Ember Strip (Seal gap with high temp, noncombustible sealant able to withstand 300°)
Minimum 1 in. 51mm) Cement Board or equivalent, (or two 1/2 in. pieces) and "k" value = 0.49.
2 x 4

Figure 40.2 Fireplace and Hearth Extension Flush on Floor but on Raised Platform

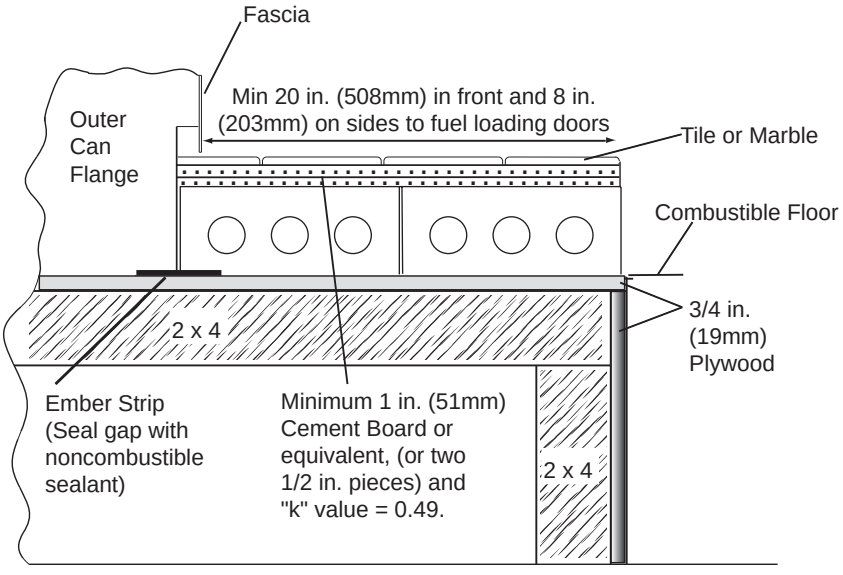

Fascia
Min 20 in. (508mm) in front and 8 in. (203mm) on sides to fuel loading doors
Outer Can Flange
Tile or Marble
Combustible Floor
3/4 in. (19mm) Plywood
2 x 4
Ember Strip (Seal gap with noncombustible sealant)
Minimum 1 in. (51mm) Cement Board or equivalent, (or two 1/2 in. pieces) and "k" value = 0.49.
2 x 4

Figure 40.3 Raised Hearth Extension to Bottom of Fascia

C. Position the Hearth Extension

Position and secure the hearth extension over the protective metal strips that have been placed partially under the fireplace front. These strips should be protruding approximately 2 in. (51 mm) from under the fireplace front and 2 in. (51 mm) on both sides of the fireplace opening. See Figure 19.1 on page 19. **Seal the crack between the hearth extension and fireplace with a bead of non-combustible sealant.** See Figure 41.1. Apply a non-combustible finishing material of your choice to the hearth extension.

NOTE: SEE PAGES 10-12 & 38 "CLEARANCES TO COMBUSTIBLES, HEARTH EXTENSIONS / FLOOR PROTECTION" FOR CLEARANCES REQUIRED FOR DIFFERENT HEARTH EXTENSION INSTALLATIONS. THE CLEARANCES MUST BE STRICTLY ADHERED TO.

WARNING

Fire Risk

- Hearth extensions are to be installed only as illustrated to prevent high temperatures from occurring on concealed combustible materials.
- Hearth sealing strips prevent burning or hot particles from inadvertently falling directly on combustible surfaces in the event the building should settle and disturb the original construction.

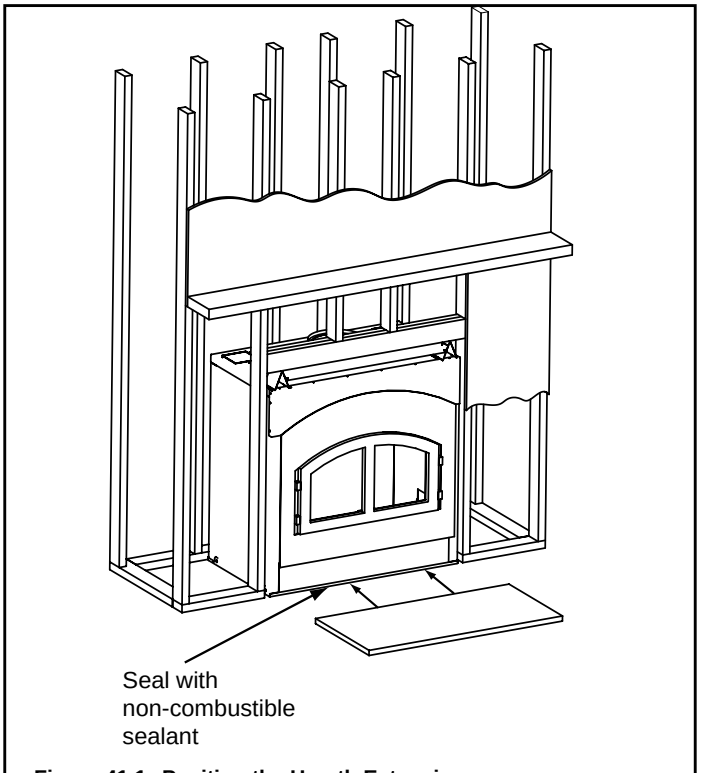


Figure 41.1 Position the Hearth Extension

D. Finishing Material

Do not install combustible materials over the metal fireplace face of the fireplace! This poses a safety hazard and may start a fire. You may only use non-combustible material over the metal face of the fireplace. **NOTE: The decorative fascia must be removable for future serviceability of the Automatic Combustion Control.**

- **Combustible Material**

  Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other materials that can ignite and burn, whether flame proofed or not, or whether plastered or un-plastered shall be considered combustible materials.

- **Non-Combustible Material**

  Materials which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

  Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials, in a Vertical Tube Furnace at 750°C, shall be considered non-combustible materials.

- **Non-Combustible Sealant Material**

  Sealants which will not ignite and burn: Super Calstick

After completing the framing and applying the facing material (drywall) over the framing, a bead of non-combustible sealant must be used to close off any gaps at the top and sides between the fireplace and facing to prevent cold air leaks. Large gaps can be bridged with fiberglass rope gasket.

Only non-combustible materials may be used to cover the metal fireplace front.

- **Cardboard OR Metal Template**

  A cardboard template of the front is printed on the outside of the shipping box. It measures 1/8 in. (3 mm) bigger all the way around than the actual front. Cut out the template along the outside of the line for use in your installation.

  A metal template is also available for more durable continued use remaining accurate over time. (See Section 12.E).

WARNING

Fire Risk

- Maintain clearances.
- Use only non-combustible material below standoffs, material such as cement board is acceptable.
- Framing or finishing material used on the front of, or in front of, the appliance closer than the minimums listed, must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.).

E. Non-Combustible Facing Material Installation

WARNING

Risk of Fire.

- Follow these instructions exactly.
- Facing materials must be installed properly to prevent fire.
- No materials may be substituted without authorization by Hearth & Home Technologies.

TOOLS NEEDED: Powered drill with #2 Phillips head bit; caulking gun.

1. Secure the fireplace to the floor or wall framing studs at a minimum of two attachment points to prevent further movement of the fireplace. The same holes and L brackets that attached the fireplace to the pallet may be used to secure the fireplace to the sub flooring by using a minimum of two 1/4 in. x 2 in. lag bolts or equivalent. Refer to Figure 42.1 and install the two metal hearth strips at this time.

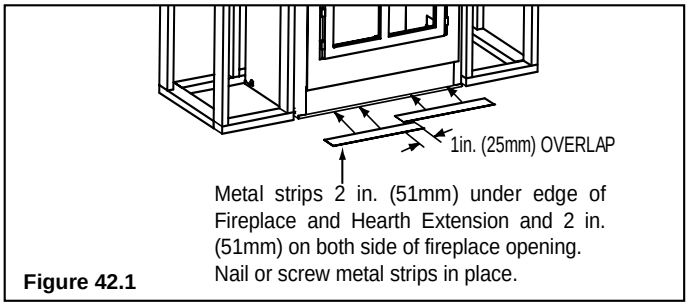

1in. (25mm) OVERLAP
Metal strips 2 in. (51mm) under edge of Fireplace and Hearth Extension and 2 in. (51mm) on both side of fireplace opening. Nail or screw metal strips in place.

Figure 42.1

NOTE: All boards are pre-drilled for your convenience. **Boards MUST be attached in the following order: bottom, top, and then the two sides.**

2. Attach the bottom board to the bottom of the outer fireplace can with enclosed screws, ensuring the board is centered.
3. Center and attach the top board to the outer can and framing members.
4. Using the Super Calstick, run a light bead (1/8 in. minimum) on the butt edges of the top board. See Figure 42.2**.**

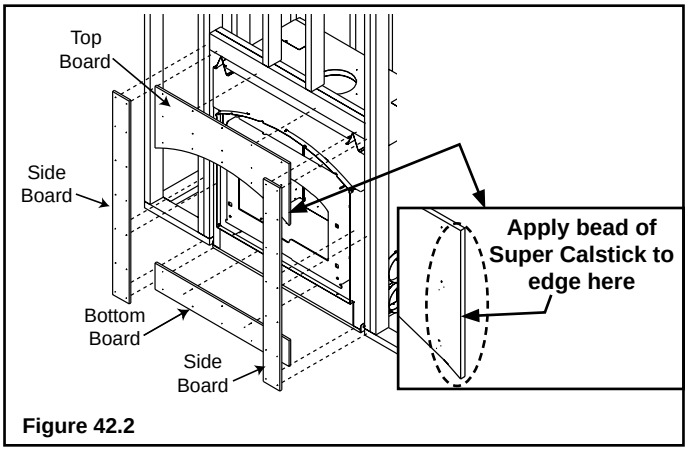


Figure 42.2

5. Ensuring the top of the side pieces and the top board align, attach the side pieces to the outer can and framing members.
6. Use a wet or dry towel or a soft brush to remove any dust or dirt from facing material. Apply a non-combustible adhesive to attach tile, stone or other non-combustible finishing materials per manufacturer's instructions.
7. The non-combustible Super Calstick may be used for sealing between the fireplace and the hearth extension. Refer to Figure 42.3.

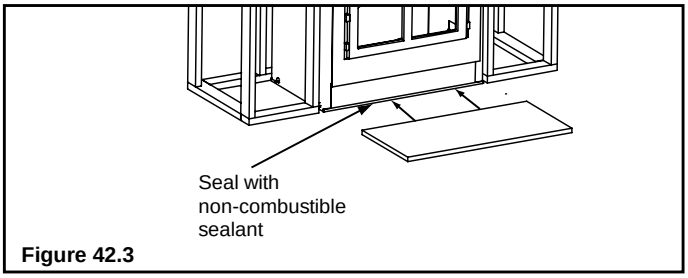


Figure 42.3

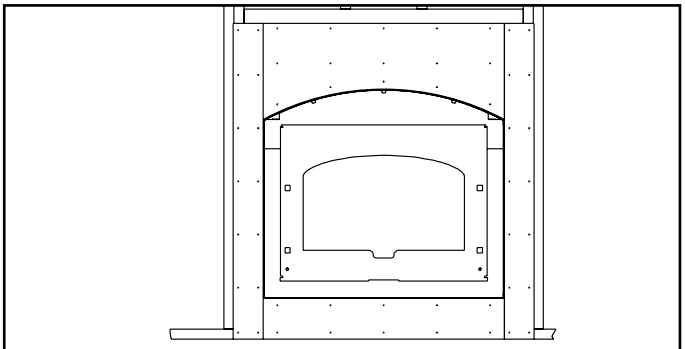


Figure 42.4 Complete installation

F. Mantel

A combustible mantel may be positioned no lower than 12 in. (305 mm) above the top of the fireplace opening, or 60 in. (1524 mm).

The combustible mantel may have a maximum depth of 12 in. (305 mm). Combustible trim pieces that project no more than 1-1/2 in. (38 mm) from the face of the fireplace can be placed no closer than 6 in. (152 mm) from the top of the fireplace opening. See Figure 43.1. Combustible trim must not cover the metal surfaces of the fireplace. This mantel clearance is in accordance with **Section 7-3.3.3 of ANSI/ NFPA211**.

Refer to page 12 for reduced mantel heights.

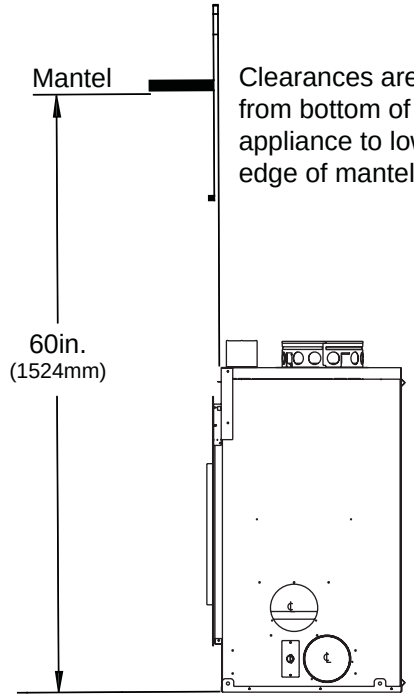


Figure 43.1 Mantel Specifications

9 Operating Instructions

WARNING

Fire Risk

- Do not operate fireplace before reading and understanding operating instructions.

Failure to operate fireplace properly may cause fire.

WARNING

HOT! DO NOT TOUCH.
SEVERE BURNS MAY RESULT.
CLOTHING IGNITION MAY RESULT.

Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers removed.
- Keep clothing, furniture, draperies and other combustibles away.

A. General Information

Fireplaces, as well as other woodburning appliances, have been used safely for many years. It has been our experience that most problems are caused by improper installation and operation of the fireplace. Make certain that installation and operation of the fireplace system is in accordance with these instructions.

It is extremely important that the fire be supervised whenever the fireplace is in use. It is also recommended that an annual inspection be performed on the fireplace system to determine if the flue system needs to be cleaned, or as in the case of any appliance, if minor repairs are required to maintain the system in top operating condition.

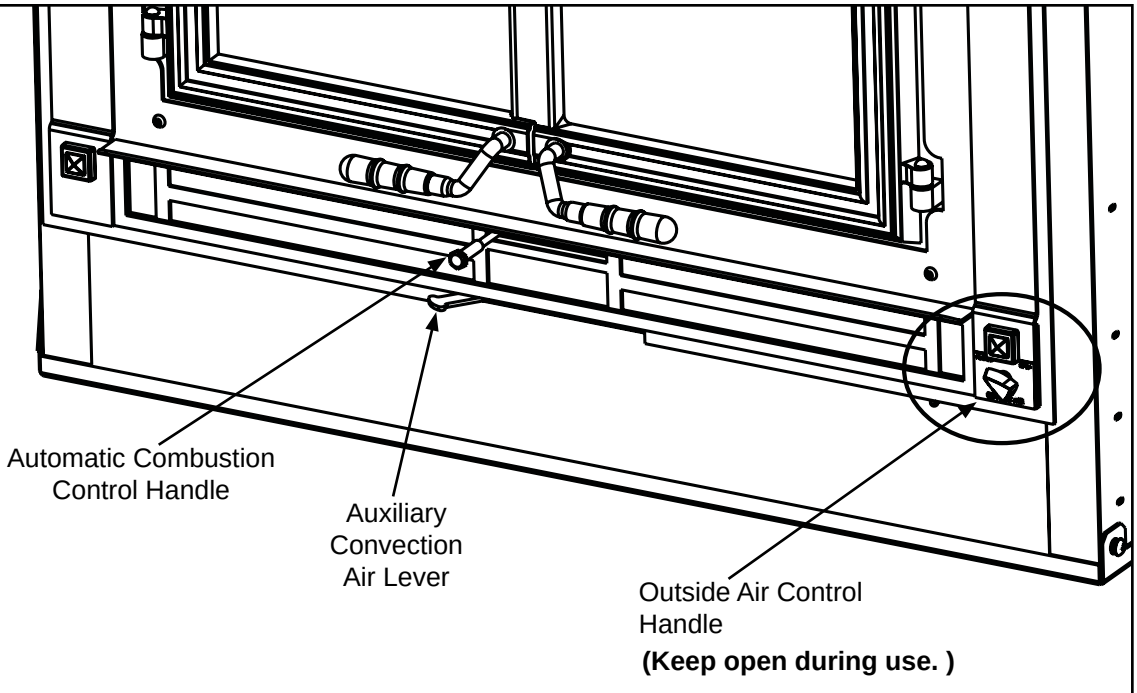


Figure 44.1 General Operating Parts

B. Outside Air

A source of air (oxygen) is required in order for combustion to take place. Whatever air is consumed by the fire must be replaced through cracks around windows, under doors, etc. Most newly constructed houses or existing homes fitted with tightly sealed doors and windows are relatively air tight. In this case, an outside air source must be made available to feed combustion air from outside the home.

The 7100FP Fireplace comes equipped with an outside air intake to feed combustion air from outside the home, along with an outside air termination cap. The 6 in. (152 mm) solid/flex pipe is not supplied.

Outside air is required to minimize the effects of negative pressure within the structure. It is recommended to utilize the shortest duct run to optimize the performance of the Outside Air flex tubing. The outside air inlet thimble should be positioned above the ground level, and must remain clear of leaves, debris, ice and/or snow. If you live in an area that experiences deep snow levels, this must be taken into consideration when determining the height placement above ground level. It must be unrestricted while unit is in use to prevent room air starvation which can cause smoke spillage and an inability to maintain a fire. Smoke spillage can also set off smoke alarms.

This fireplace will operate correctly only if adequate ventilation is provided to allow proper draft to the fireplace system. Hearth & Home Technologies assumes no responsibility for the improper performance of the fireplace system caused by inadequate draft due to environmental conditions, down drafts, tight sealing construction of the structure, or mechanical exhausting devices which create a negative air pressure within the structure where the fireplace is located.

NOTE: OUTSIDE AIR IS REQUIRED.

An outside air control handle allows you control of the outside air inlet. This may be closed only when the fireplace is not in use to prevent cold air infiltration. Use of outside air for combustion is required to conserve heated air within the structure and to provide make up air to keep the fireplace venting properly.

See Figure 44.1, on page 44, for location and operation.

⚠ CAUTION

Outside air control handle may be warm. Adjust before lighting fire.

C. Clear Space Near the Fireplace

Combustible materials must not be stored on the hearth extension. Room furnishings such as drapes, curtains, chairs or other combustibles must be at least 4 ft (1219mm) from the open front of the fireplace.

D. Firescreen

A firescreen is optional to control sparks. It must be in place whenever the fireplace is in use. Glass doors or firescreens must not be used to hold burning material inside the fireplace. Only those glass doors specifically tested and listed for use with the specific fireplace model should be used.

Use both hands to stabilize the screen. Ensure that the screen is fully attached. Be careful not to stack wood close to the front or too high that logs could roll out the front. Start with a small fire and adjust your heat to desired setting. If smoke spillage occurs, put on gloves and then remove the screen and close the doors. Refer to Troubleshooting Draft Problems on page 52.

⚠ WARNING

Fire Risk

- Close firescreen when burning fireplace.
- Do not use firescreen or glass doors to hold burning material in fireplace.

Firescreen controls sparks.

Glass may break or burning material may roll out.

- Always wear gloves when installing or removing the screen as the screen may become extremely hot while in use.

E. Glass Doors

This fireplace has been tested and listed for use with doors as specified in Section 12.E. Please refer to the manual packed with each set of doors for installation instructions.

⚠ WARNING

Fire Risk
Smoke Risk

- Doors must be fully opened or fully closed when operating fireplace.

Partially opened doors may draw flame, smoke or heat from fireplace.

F. Blower Operation

Instructions with Blower Override Switch in manual position.

1. **Initial (cold) Startup:** Leave blower off until your fireplace is hot and a good coal bed is established, approximately 30 minutes after fuel is lit.
2. **High Burn Setting:** The blower may be left on throughout the burn.
3. **Medium or Medium High Burn Setting:** The blower should be left off until a good burn is established, then turned on medium or high rate.
4. **Low Burn Setting:** The blower tends to cool off the fireplace. Leave blower off until the burn is well established; then, if you wish, turn the blower on at a low rate.

NOTE: The blower is equipped with a snap disc that will turn the blower on and off depending on the temperature of the fireplace. If the blower is not coming on at the desired time, flip the override switch to manual and operate the blower as described above.

The override switch and the blower speed control are hard wired at time of installation and installed in a standard wall mount with junction box on the wall.

G. Heat Zone Operation

The Heat-Zone accessory kit conveys warm air from the fireplace through air duct(s) to remote locations in the same room or other rooms of the building. You may install 1 or 2 Heat-Zone kits on the fireplace. Follow the instructions that is supplied with the kit. Installation of this kit **MUST** be performed by a qualified service technician. If any parts are missing or damaged, contact your local dealer before starting installation. DO NOT install a damaged kit.

The Heat-Zone kit is carefully engineered and must be installed only as specified. If you modify it or any of its components, you will void the warranty and you may possibly cause a fire hazard. Installation must be done according to applicable local, state, provincial, and/or national codes.

DUCT RUN REQUIREMENTS
MAXIMUM Duct Run = 40 ft. (12m)
MINIMUM Duct Run = 36 in. (914mm)

DUCTING MATERIAL
6 in. (152mm) B-Vent Only
DO NOT DUCT into existing furnace plenum

MINIMUM CLEARANCE TO COMBUSTIBLE
1 in. (25mm) from the B-Vent
1/2 in. (13mm) from top and bottom of outlet box
0 in. (0mm) from the sides of outlet box
12 in. (305mm) from wall register to ceiling

CAUTION

ALL wiring should be done by a qualified electrician and shall be in compliance with local codes and with the National Electric Code NFPA/NEC No. 70-current (in the United States), or with the current CSC22.1 Canadian Electric Code (in Canada).

H. Wood Fuel

Hardwood vs. Softwood

Your fireplace's performance depends a great deal on the quality of the firewood you use. Contrary to popular belief, one species of wood varies very little to the other in terms of energy content. All seasoned wood, regardless of species, contains about 8,000 BTU's per pound. The important factor is that hardwoods have a greater density than softwoods. Therefore, a piece of hardwood will contain about 60% more BTU's than an equal size piece of softwood. Since firewood is commonly sold by the cord (128 cu. ft) a volume measurement, a cord of seasoned oak (hardwood) would contain about 60% more potential energy than a cord of seasoned pine (softwood).

There are many definitions of hardwood and softwood. Although not true in every case, one of the most reliable is to classify them as coniferous or deciduous. Softwoods are considered coniferous. These are trees with needle-like leaves that stay green all year and carry their seeds exposed in a cone. Examples of softwood trees are Douglas fir, pine, spruce and cedar. Softwoods, being more porous, require less time to dry, burn faster and are easier to ignite than hardwoods. Deciduous trees are broadleaf trees that lose their leaves in the fall. Their seeds are usually found within a protective pod or enclosure. Hardwoods fall into this category. Some examples of deciduous trees are oak, maple, apple, and birch. However, it should be noted that there are some deciduous trees that are definitely not considered hardwoods such as poplar, aspen and alder. Hardwoods require more time to season, burn slower and are usually harder to ignite than softwoods. Obviously, you will use the type of wood that is most readily available in your area. However, if at all possible the best arrangement is to have a mix of softwood and hardwood. This way you can use the softwood for starting the fire giving off quick heat to bring the appliance up to operating temperature. Then add the hardwood for slow, even heat and longer burn time.

Moisture content

Regardless of which species of wood you burn, the single most important factor that affects the way your fireplace operates is the amount of moisture in the wood. The majority of the problems fireplace owners experience are caused by trying to burn wet, unseasoned wood. Freshly cut wood can be as much water as it is wood, having a moisture content of around 50%. Imagine a wooden bucket that weighs about 8 pounds. Fill it with a gallon of water, put it in the firebox and try to burn it. This sounds ridiculous but that is exactly what you are doing if you burn unseasoned wood. Dead wood lying on the forest floor should be considered wet, and requires full seasoning time. Standing dead wood can be considered to be about two-thirds seasoned, if cut at the dry time of the year.

The problems with burning wet, unseasoned wood are two fold. First, you will receive less heat output from wet wood because it requires energy in the form of heat to evaporate the water trapped inside. This is wasted energy that should be used for heating your home. Secondly, this moisture evaporates in the form of steam which has a cooling effect in your firebox and chimney system. When combined with tar and other organic vapors from burning wood it will form creosote which condenses in the relatively cool firebox and chimney. See the maintenance section of this manual for more information regarding creosote formation and need for removal.

Even dry wood contains at least 15% moisture by weight, and should be burned hot enough to keep the chimney hot for as long as it takes to dry the wood out - about one hour. To tell if wood is dry enough to burn, check the ends of the logs. If there are cracks radiating in all directions from the center, it is dry. If your wood sizzles in the fire, even though the surface is dry, it may not be fully cured.

Seasoning

Seasoned firewood is nothing more than wood that is cut to size, split and air dried to a moisture content of around 20%. The time it takes to season wood varies from around nine months for soft woods to as long as eighteen months for hardwoods. The key to seasoning wood is to be sure it has been split, exposing the wet interior and increasing the surface area of each piece. A tree that was cut down a year ago and not split is likely to have almost as high a moisture content now as it did when it was cut.

⚠ WARNING

Fire Risk

- Do NOT burn wet or green wood.
- Store wood in dry location.
- Stack wood so both ends are exposed to air.

Wet, unseasoned wood can cause accumulation of creosote.

Storing Wood

Splitting wood before it is stored reduces drying time. The following guideline will ensure properly seasoned wood:

a. Stack the wood to allow air to circulate freely around and through the woodpile.

b. Elevate the woodpile off the ground to allow air circulation underneath.

c. The smaller the pieces, the faster the drying process. Any piece over 6 in. (152 mm) in diameter should be split.

d. Wood should be stacked so that both ends of each piece are exposed to air, since more drying occurs through the cut ends than the sides. This is true even with wood that has been split.

e. Store wood under cover, such as in a shed, or covered with a tarp, plastic, tar paper, sheets of scrap plywood, etc., as uncovered wood can absorb water from rain or snow, delaying the seasoning process. Avoid covering the sides and ends completely. Doing so may trap moisture from the ground and impede air circulation.

⚠ WARNING

Fire Risk

Do NOT store wood:

- Closer than required clearances to combustibles to fireplace.
- Within space required for loading or ash removal.

I. Starting a Fire

Before lighting your first fire in the fireplace, make certain that the baffle and the ceramic blanket are correctly positioned. It should be resting against the rear support. **Also refer to care and cleaning of plated surfaces on page 58 before lighting your first fire.**

NOTE: REMOVE ALL LABELS FROM GLASS BEFORE LIGHTING THE FIRST FIRE IN YOUR APPLIANCE.

There are many ways to build a fire. The basic principle is to light easily-ignitable tinder or paper, which ignites the fast burning kindling, which in turn ignites the slow-burning firewood. Here is one method that works well:

1. Place several wads of crushed paper on the firebox floor. Heating the flue with slightly crumpled newspaper before adding kindling keeps smoke to a minimum.
2. Lay small dry sticks of kindling on top of the paper.
3. Fully open the Slide Air Control by moving it completely to the right.
4. Make sure that no matches or other combustibles are in the immediate area of the fireplace. Be sure the room is adequately ventilated and the flue unobstructed.
5. Light the paper in the fireplace. **NEVER light or rekindle fireplace with kerosene, gasoline, or charcoal lighter fluid; the results can be fatal.**
6. Once the kindling is burning quickly, add several full-length logs 3 in. (76 mm) or 4 in. (102 mm) in diameter. Be careful not to smother the fire. Stack the pieces of wood carefully: near enough to keep each other hot, but far enough away from each other to allow adequate air flow between them.
7. When ready to reload the fireplace, add more logs. Large logs burn slowly, holding a fire longer. Small logs burn fast and hot, giving quick heat.
8. Adjust the Slide Air Control; the more you close down the Control, (sliding left) the lower and slower the fire will burn. The more you open the Air Control, (sliding right) the more heat will be produced and the faster the wood will burn.

As long as there are hot coals, repeating steps 7 and 8 will maintain a continuous fire throughout the season.

NOTE: The special high temperature paint that your fireplace is finished with will cure as your fireplace heats. You will notice an odor and perhaps see some vapor rise from the fireplace surface; this is normal. We recommend that you open a window until the odor dissipates and paint is cured.

NOTE: Fireplace should be run full open for a minimum of 30 minutes a day during heating season to keep air passages clean.

Note: The first three or four fires should be of moderate size to allow the oils and binders to be burned from the fireplace and the refractory and paint to cure. You may notice an industrial odor the first few fires. This is considered normal.

⚠ CAUTION

Odors and vapors released during initial operation.

- Curing of high temperature paint.
- Open windows for air circulation.

Odors may be irritating to sensitive individuals.

⚠ WARNING

Fire Risk

Keep combustible materials, gasoline and other flammable vapors and liquids clear of fireplace.

- Do NOT store flammable materials close to the fireplace.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this fireplace.
- Keep all such liquids well away from the fireplace while it is in use.

Combustible materials may ignite.

⚠ WARNING

Fire Risk.

For use with solid wood fuel only.
Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).

J. Burning Process

Fire requires 3 things to burn: fuel, air and heat. If heat is robbed from the fireplace during the drying stage, the new load of wood has reduced the chances for a good clean burn. For this reason, it is always best to burn dry, seasoned firewood. We do not advise burning unseasoned wood, however if it happens, you must open the Slide Air Control and burn the fireplace at a high burn setting for a longer time to start it burning.

Kindling or 1st stage:

It helps to know a little about the actual process of burning in order to understand what goes on inside a fireplace. The first stage of burning is called the kindling stage. In this stage, the wood is heated to a temperature high enough to evaporate the moisture which is present in all wood. The wood will reach the boiling point of water (212°F) and will not get any hotter until the water is evaporated. This process takes heat from the coals and tends to cool the fireplace.

2nd stage:

The next stage of burning, the secondary stage, is the period when the wood gives off flammable gases which burn above the fuel with bright flames. During this stage of burning it is very important that the flames be maintained and not allowed to go out. This will ensure the cleanest possible fire. If you are adjusting your fireplace for a low burn rate, you should close down the air to the point where you can still maintain some flame. If the flames tend to go out, the fireplace is set too low for your burning conditions.

Final stage:

The final stage of burning is the charcoal stage. This occurs when the flammable gases have been mostly burned and only charcoal remains. This is a naturally clean portion of the burn. The coals burn with hot blue flames.

It is very important to reload your fireplace while enough lively hot coals remain in order to provide the amount of heat needed to dry and rekindle the next load of wood. It is best to open the air control for a short while ***before reloading***. This livens up the coalbed. Open door slowly so that ash or smoke does not exit fireplace through opening. You should also break up any large chunks and distribute the coals so that the new wood is laid evenly on hot coals.

CAUTION

Fireplace operation does require air. Do not take air from other fuel burning appliances which can result in improper venting (smoking) or air dilution. Always provide adequate makeup air.

K. Automatic Combustion Control (ACC)

Typically, when you build a fire, you need to open the controls to give the fire more air so the wood will start burning. You would then have to physically watch the fire and shut down the air controls so the fireplace does not overfire and burn up your wood too quickly. With the Automatic Combustion Control (ACC) system, you do not have to physically watch the fire. Once you set the ACC system it will monitor the fire for you.

Set the ACC slide control to HIGH by moving it all the way to the right. As you move the control rod to the right, about 3/4 of the way you will feel some resistance. You must move past that resistance approximately 3/4 in. (19 mm) to reach the HIGH setting. Start your fire and then move the slide control to the left to the desired burn rate. (See page 50 for the position of the slide control for the different burn rates.) The fireplace will automatically go to that level after the fire is fully established. This allows for less manual monitoring of the fire and more efficient use of fuel while maintaining the desired heat output.

NOTE: Close controls when not burning.

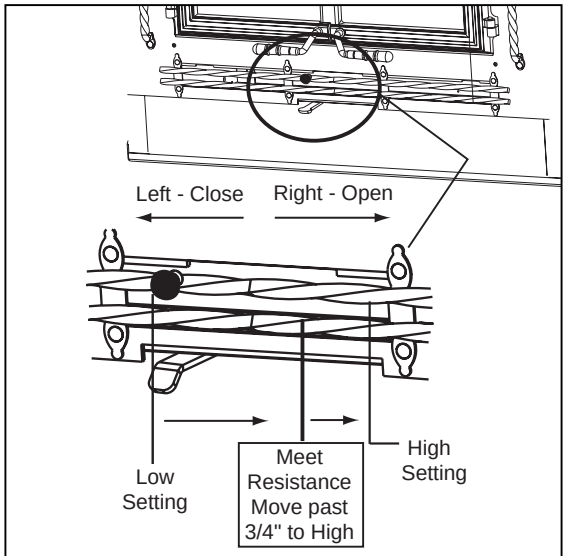


Figure 49.1 Operating the ACC Controls

***Slide Air Control**

Slide LEFT to Stop
Stop to 1/8 in. -1/2 in. open
Stop to 1/2 in. - 1-1/2 in. open
All the way to RIGHT

THE DECORATIVE FASCIA MUST BE REMOVABLE ON YOUR FIREPLACE IN ORDER TO SERVICE THE AUTOMATIC COMBUSTION CONTROL SYSTEM.

L. Burning Guidelines

For maximum operating efficiency with the lowest emissions, follow these operating procedures:

1. Regardless of desired heat output, when loading the fireplace, burn your fireplace with the Slide Air Control wide open (fully to the right) for a minimum of 5 to 15 minutes.
2. Regulate burn rate (heat output) by using the Slide Air Control. See Figure 49.1 on page 49.
3. Heat output settings: Follow the burn rate instructions listed below.

NOTE: To establish your settings, always begin with the air control all the way to the left to STOP and then move it to the right for your desired setting.

Burn Rate	BTU / Hr	*Slide Air Control
Low	Below 10,000	Slide LEFT to Stop
Medium	10,000 - 15,000	Stop to 1/8 in. -1/2 in. open
Medium High	15,000 - 30,000	Stop to 1/2 in. - 1-1/2 in. open
High	Maximum Heat	All the way to RIGHT

These are approximate settings, and will vary with type of wood or chimney draft.

NOTE: If reloading a bright, hot coal bed for longer (low) burn time, setting the ACC may not be required.

NOTE: BURN DRY, WELL-SEASONED WOOD.

M. Burn Rates

HIGH - Maximum Heat: Fully open (slide air control all the way to the right). It is important to do this when reloading the fireplace. Failure to do this could result in excessive emissions (smoke).

MEDIUM HIGH BURN RATE - 15,000 to 30,000 BTU: After a wood load has been burning on high for 5 to 15 minutes, close the Slide Air Control to 1/2 in. - 1-1/2 in. (13 mm-38 mm) distance open. (Move the handle to left to stop and then to right for the proper setting).

MEDIUM - 10,000 - 15,000 BTU: After a wood load has been burning on high for 5 to 15 minutes (longer for very large pieces or wet wood), slide Slide Air Control left to 1/8 in. -1/2 in. (3 mm-13 mm) distance open. (Move the handle to left to stop and then to right for the proper setting).

LOW - Below 10,000 BTU: After a wood load has been burning on high for 5 to 15 minutes (longer for very large pieces or wet wood), gradually slide the Air Control left to close down the air, making sure to maintain flames in the fireplace. It is very important to maintain flames in your fireplace during the first few hours of a low burn to avoid excessive air pollution.

N. Opacity

This is the measure of how cleanly your fireplace is burning. Opacity is measured in percent; 100% opacity is when an object is totally obscured by the smoke column from a chimney, and 0% opacity means that no smoke column can be seen. As you become familiar with your fireplace, you should periodically check the opacity. This will allow you to know how to burn your fireplace as nearly smoke-free as possible (goal of 0% opacity).

⚠ WARNING

Fire Risk.

Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do NOT store flammable materials in the appliance's vicinity.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or "freshen up" a fire in this heater.
- Keep all such liquids well away from the heater while it is in use.
- Combustible materials may ignite.

⚠ WARNING

Fire Risk.

Do NOT store wood:

- Closer than required clearances to combustibles to appliance
- Within space required for loading or ash removal.

Do NOT operate appliance:

- With appliance door open.
- With ash removal system door open.

⚠ WARNING

Fire Risk.

- Do NOT burn wet or green wood.
- Store wood in dry location.
- Stack wood so both ends are exposed to air.

Wet, unseasoned wood can cause accumulation of creosote.

O. Overfiring

Do not overfire. Using flammable liquids or too much wood, burning trash in the fireplace, or allowing too much air into the fireplace, may result in overfiring. If the chimney connector or fireplace glows red or even worse, white, the fireplace is overfired. This condition may ignite creosote in the chimney, which can be dangerous, possibly causing a house fire. If you overfire, immediately close the air controls and door, if open, to reduce the air supply to the fire. **Overfiring will void the fireplace warranty.**

P. Chimney Fire

In the event of a chimney fire:

- Have the chimney and adjacent structure inspected by qualified professionals. Hearth & Home Technologies recommends that NFI or CSIA certified professionals, or technicians under the direction of certified professionals, conduct a minimum of an **NFPA 211 Level 2** inspection of the chimney.
- Replace components of the chimney and fireplace as specified by the professionals.
- Ensure all joints are properly engaged and the chimney is properly secured.

A chimney fire can permanently damage your chimney system. Failure to replace damaged components and make proper repairs creates risk of fire.

Q. Fire Safety

To provide reasonable fire safety, the following should be given serious consideration:

1. Install at least one smoke detector on each floor of your home to ensure your safety. They should be located away from the heating appliance and close to the sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
3. A practiced evacuation plan, consisting of at least two escape routes.
4. A plan to deal with a chimney fire as follows:

   In the event of a chimney fire:

   a. Notify fire department
   b. Prepare occupants for immediate evacuation.
   c. Close all openings into the stove.
   d. While awaiting fire department, watch for ignition of adjacent combustibles from overheated stove pipe, hot embers or sparks from the chimney.

10 Troubleshooting

This fireplace will operate correctly only if adequate ventilation is provided to allow proper draft to the fireplace system. Hearth & Home Technologies assumes no responsibility for the improper performance of the fireplace system caused by inadequate draft due to environmental conditions, down drafts, tight sealing construction of the structure, or mechanical exhausting devices which will create a negative air pressure within the structure where the fireplace is located.

A. Understanding Vent Problems

If smoke spillage occurs from a fireplace opening when the door is open and the proper chimney height, flue size, and configuration requirements for the installation have been met, there is either a leakage in the flue, a blockage in the flue, or some condition is in effect to draw smoke from the fireplace into the house. Understanding and differentiating the conditions which can cause each of these kinds of spillage problems is essential to their solution.

- Flue Leakage
  Check for improperly connected flue joints or a damaged flue joint in the chimney system. Such leakage would reduce draft (air would be drawn in through the leaks rather than through the fireplace). The result might be difficult start-up and smoky fires that might spill if other adverse draft conditions accompany this problem.

- Flue Blockage
  The damper should be open.

B. Draft Problems

This fireplace will operate correctly only if adequate ventilation is provided to allow proper draft to the fireplace system. Hearth & Home Technologies assumes no responsibility for the improper performance of the fireplace system caused by inadequate draft due to environmental conditions, windy conditions, down drafts, tight sealing construction of the structure, or mechanical exhausting devices which will create a negative air pressure within the structure where the fireplace is located.

Flue draft is measured as negative pressure in the chimney. The amount of negative pressure determines how strong the draft is. The draft is important because it draws the combustion air into the fireplace and pulls the smoke out of the chimney.

There are three basic criteria essential in establishing and maintaining flue draft:

- Availability of combustion air.
- Heat generated from the fire.
- Diameter and height of the flue system.

These three factors work together as a system to create the flue draft. Increasing or decreasing any one of them will affect the other two and thus change the amount of draft in the entire system.

If the fire is hard to start and smoke spills out of the fireplace, or you find it difficult to establish and maintain a moderately high burn rate, then the flue draft is too low and corrective measures must be taken.

Be sure you have air available for combustion and that your firewood is dry and well seasoned. Build your fires properly and according to the instructions given in operating instructions, “Starting a Fire”. Be sure your flue system is installed correctly and that it is the proper diameter and height. Check for the following:

- All chimney sections are properly installed.
- The chimney is clean and free of creosote or soot buildup.
- Make sure overhanging trees and branches are cut back within ten feet of the top of the chimney and is free of debris from animals.
- Ensure the chimney cap is clean and free of any buildup of soot or creosote. if cap is equipped with a spark arrestor screen.
- Be sure the ceramic blanket (above the baffle) and the baffle are in their proper positions
- The wood being used in dry and well seasoned.

If you still suspect you have a low draft problem it may be necessary to increase the volume of air in your flue system. Since the diameter of your flue system is matched with the size of the flue collar and should not be changed, then the height of the system must be increased. Add chimney sections a little at a time until the draft improves.

In some cases, regardless of what you do, it can still be difficult to establish the proper flue draft. This is especially evident when using an exterior factory-built chimney or exterior masonry chimney. Try placing several sheets of crumpled paper on top of your kindling as close to the flue outlet of the fireplace as possible. Light this paper first then the paper under the kindling. The heat generated from the rapidly burning paper on top of the kindling should help get the draft established.

Still other factors can affect how well your flue system performs. Neighboring structures, high winds, tall trees, even hillsides can affect air currents around the chimney. Well designed chimney caps are available that can help. Your fireplace dealer is the local expert in your area. He can usually make suggestions or discover problems that can be easily corrected allowing your fireplace to operate correctly as it has been designed, providing safe and economical heat for your home.

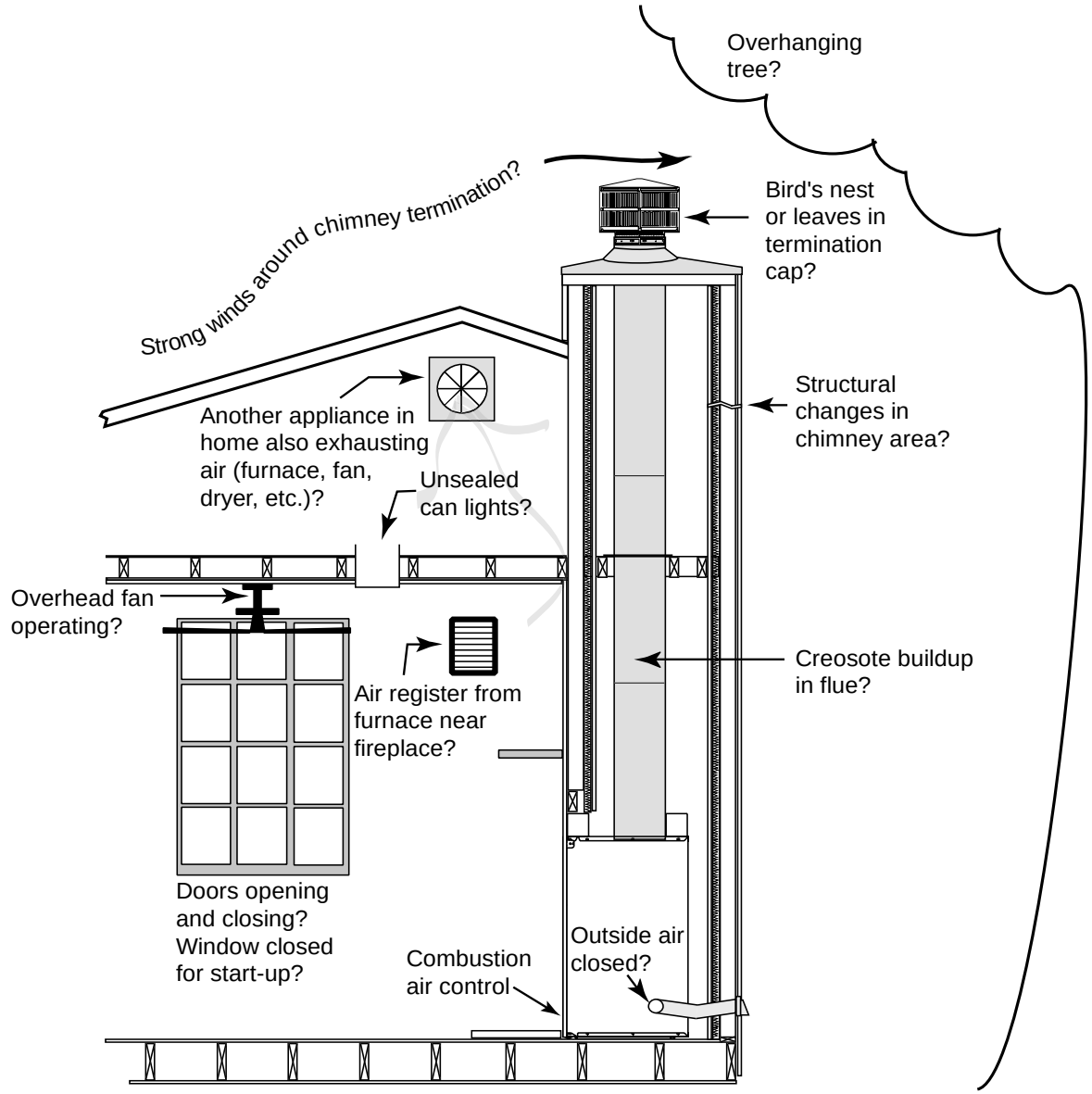

Overhanging tree?
Strong winds around chimney termination?
Bird's nest or leaves in termination cap?
Another appliance in home also exhausting air (furnace, fan, dryer, etc.)?
Structural changes in chimney area?
Unsealed can lights?
Overhead fan operating?
Creosote buildup in flue?
Air register from furnace near fireplace?
Doors opening and closing? Window closed for start-up?
Outside air closed?
Combustion air control

Figure 53.1 Factory-built Fireplaces: Troubleshooting

C. Diagnostics and Problem Solving

1. If I can't get a good fire going, what am I doing wrong?

Diagnostic Question	Possible Causes of Condition	Solutions
Are the air controls open?	• No draft • No combustion air	Open air controls
Is there enough paper?	Insufficient heat to ignite kindling	Use more paper
Is there enough kindling? Is the kindling dry?	Insufficient heat to ignite fuel	Use drier kindling
Is there enough or too much wood? Is it too large? Is it dry enough?	• Insufficient heat to establish draft • Insufficient air passage • Insufficient surface area • Ignition temperature high due to moisture	Use small split wood that is well seasoned (split, covered on top minimum 6 months, preferably a year)
Are there adequate air spaces between fuel pieces?	Insufficient combustion air and exposed surface area	Arrange kindling and wood for air movement
Is the chimney pre-warmed?	Exposed, cold chimney downdrafting	Use lighted rolled newspaper at flue opening to start upward air movement
Is there smoke in the house?	• Obstruction in chimney • Downdraft from chimney temperature or from negative house pressure	• Have chimney checked if it worked previously • Pre-warm chimney • Shut off exhaust devices • Open window slightly
Does the kindling wood not ignite?	Condition, amount, arrangement of kindling and fuel	Use more, drier, well-spaced kindling and fuel.
Does the kindling ignite, but the fuel doesn't?	• Amount of kindling • Condition of fuel	• Use more kindling • Use smaller, dry wood
Does the fuel ignite, but not burn well?	• Draft problem • Condition of fuel	• Use well-seasoned wood and sufficient amount • Turn exhaust fans off • Open window slightly

2. I smell smoke in the house after we have had a fire. What is the cause/what can I do?

Diagnostic Question	Possible Causes of Condition	Solutions
Is the chimney clean?	No: Creosote odor	Have chimney cleaned

3. I smell smoke in the house during operation. What is causing it?

Diagnostic Question	Possible Causes of Condition	Solutions
Do fires start and burn well?	No: • Chimney obstruction • Not enough kindling and/or fuel to establish draft • Inadequate combustion air • Air controls not open Yes: Competition with exhaust devices	No: • Check & clean chimney if needed • Use adequate kindling & fuel • Open air controls • Open window • Check for need for balanced air make-up (Outside Air) • Check door rope for seal. Yes: • Do not use exhaust fans during startup • Check for need for balanced air make-up (Outside Air)

4. I don't get enough/any heat. What can I do about it?

Diagnostic Question	Possible Causes of Condition	Solutions
How much wood is used for fire?	Insufficient fuel	Make larger fires
How well seasoned is the wood?	Condition of fuel	Burn seasoned wood: (split, covered on top minimum 6 months, preferably a year) (about 20% moisture)
Did you install a blower?	Snap disc may be faulty	Replace snap disc
How much heat ouput do you expect?	• Unrealistic expectations • Heat output too low for square footage	Replace appliance with one with greater heat output
How are air controls set?	Operational problems	Follow manufacturer's instructions

5. The wood burns too fast. What can I do?

Diagnostic Question	Possible Causes of Condition	Solutions
What is the condition of the wood?	Extremely dry wood	Mix in less seasoned wood after fire established
How are air controls set?	Operational problems	Follow manufacturer's instructions
Fireplace won't shut down.	ACC Timer is not working properly	Call qualified Quadra-Fire dealer

11 Maintenance and Servicing the Fireplace

WARNING

Asphyxiation Risk
Fire Risk

Annual inspection by qualified technician recommended.

Check:

- Condition of doors, surrounds and fronts
- Condition of glass and glass assembly
- Obstructions of combustion and ventilation air
- Obstructions of termination cap

Clean:

- Glass
- Air passageways, grilles

A. General Maintenance

1. Creosote (Chimney) Cleaning

- **Frequency:** As necessary; at least annually before lighting stove or once every 2 months during heating season.
- **By:** Homeowner / Chimney Sweep
- **Task:** See the following instructions.

Remove all ash from the firebox and extinguish all hot embers before disposal. Allow the appliance to cool completely. Remove baffle and ceramic blanket from appliance before cleaning chimney. Otherwise residue can pile up on top of the baffle and ceramic blanket and the appliance will not work properly. (See Baffle Removal on page 32). Close the door tightly. The creosote or soot should be removed with a brush specifically designed for the type of chimney in use. Clean out fallen ashes from the firebox. A chimney sweep can perform this service.

It is also recommended that before each heating season the entire system be professionally inspected, cleaned and repaired if necessary.

Inspection: Inspect the system at the appliance connection and at the chimney top. Cooler surfaces tend to build creosote deposits quicker, so it is important to check the chimney from the top as well as from the bottom.

Formation and Need For Removal: When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a newly-started or a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote creates an extremely hot fire which may damage the chimney or even destroy the house. The chimney connector and chimney should be inspected once every 2 months during the heating season to determine if a creosote or soot buildup has occurred. If creosote or soot has accumulated, it should be removed to reduce the risk of a chimney fire.

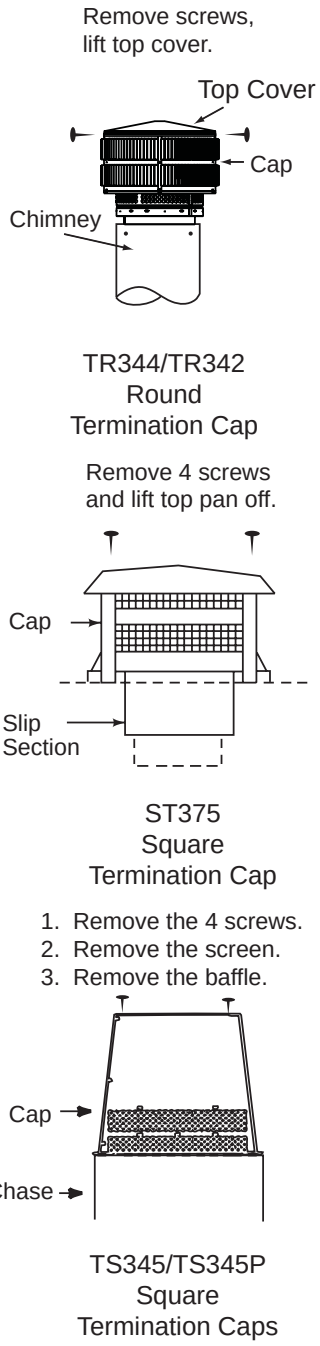


Figure 56.1 Chimney & Termination Cap Cleaning

WARNING

Fire Risk.

Prevent creosote buildup.

- Inspect chimney connector and chimney once every two months during heating season.
- Remove creosote to reduce risk of chimney fire.
- Ignited creosote is extremely HOT.

WARNING

Fire Risk.

- Do not use chimney cleaners or flame colorants in your appliance.

Will corrode pipe.

2. Disposal of Ashes

- **Frequency:** As necessary
- **By:** Homeowner
- **Task:** See the following instructions.

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

WARNING

Fire Risk.

Disposal of Ashes

- Ashes should be placed in metal container with tight fitting lid.
- Do not place metal container on combustible surface.
- Ashes should be retained in closed container until all cinders have thoroughly cooled.

3. Glass Cleaning

- **Frequency:** As necessary
- **By:** Homeowner
- **Task:** See the following instructions.

Clean glass with a non-abrasive glass cleaner. Abrasive cleaners may scratch and cause glass to crack. If the deposits on the glass are not very heavy, normal glass cleaners work well. Heavier deposits may be removed by using a damp cloth dipped in wood ashes or by using a commercially available oven cleaner. After using an oven cleaner, it is advisable to remove any residue with a glass cleaner or soap and water. Oven cleaner left on during the next firing can permanently stain the glass and damage the finish on plated metal surfaces.

A portion of the combustion air entering the firebox is deflected down over the inside of the door glass. This air flow "washes" the glass, helping to keep smoke from adhering to its surface. When operated at a low burn rate, less air will be flowing over the glass and the smoky, relatively cool condition of a low fire will cause the glass to become coated. Operating the appliance with the Burn Rate Air Control and Start-Up Air Control all the way open for 15-20 minutes should remove the built up coating.

B. Glass Replacement

1. Ensure that the fire is out and the appliance is cool to the touch.
2. Protect a table or counter top with padding or towels.
3. Remove door with broken glass from the appliance by lifting door up and off of the hinges.
4. Lay door face down on a table or counter making sure handle and handle attachment knob hang over the edge of the table top so door lays flat, on a soft surface.
5. Remove screws from the top and bottom glass frames (5 on each door) using a #2 Phillips Head screwdriver. Set frames aside and retain screws.

   HINT: Soak screws in penetrating oil for easy removal.
6. Remove the glass and discard.
7. Position the new glass with edges evenly overlapping the opening in the front door.
8. Replace the glass frames. Be careful not to cross thread the screws.
9. Start screws to secure glass frames to door, keeping them loose for adjusting the glass. Then continue to tighten each screw alternately, a few turns at a time, until the glass panel is tightened snugly. DO NOT OVER-TIGHTEN SCREWS.
10. Replace the door on the appliance.
11. After the first burn, recheck the tightness of the screws.

NOTE: REMOVE ALL LABELS FROM GLASS BEFORE LIGHTING THE FIRST FIRE IN YOUR APPLIANCE.

WARNING

Fire Risk.

Injury Risk.

- Use only glass specified in manual.
- DO NOT REPLACE with any other material.

Glass breakage will occur.

C. Brick Replacement

The firebox of your fireplace is lined with high quality firebrick, which has exceptional insulating properties. There is no need to use a grate; simply build a fire on the firebox floor. **Do not operate the fireplace without firebrick.**

IMPORTANT: The bricks are very similar in size. Be certain you have the proper brick in the correct location. Measure the brick size for accuracy.

1. After the coals are completely cooled, remove all old brick and ash from unit and vacuum out firebox.
2. Remove the brick from the box and lay out to diagram as shown in Figure 58.1**.**
3. Lay bottom bricks in unit.
4. Install rear bricks on the top of the bottom bricks. Slide top of bricks under clip on back of firebox wall and push bottom of brick back.
5. Install side bricks. Slide top of brick under clips on side of firebox and push the bottom of the brick until it is flush with the side of the unit.

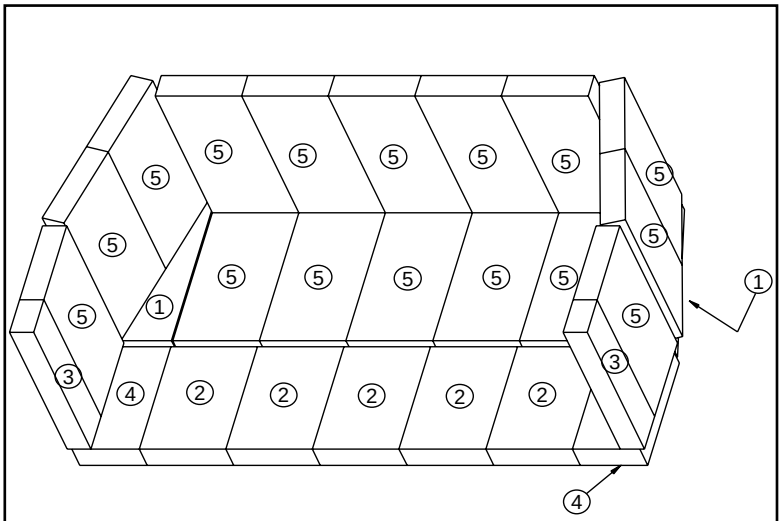


Figure 58.1 Brick Pattern

Use Part 832-2370 when ordering individual brick. Provide brick dimension or copy this page, mark the desired brick and take it to your authorized dealer.

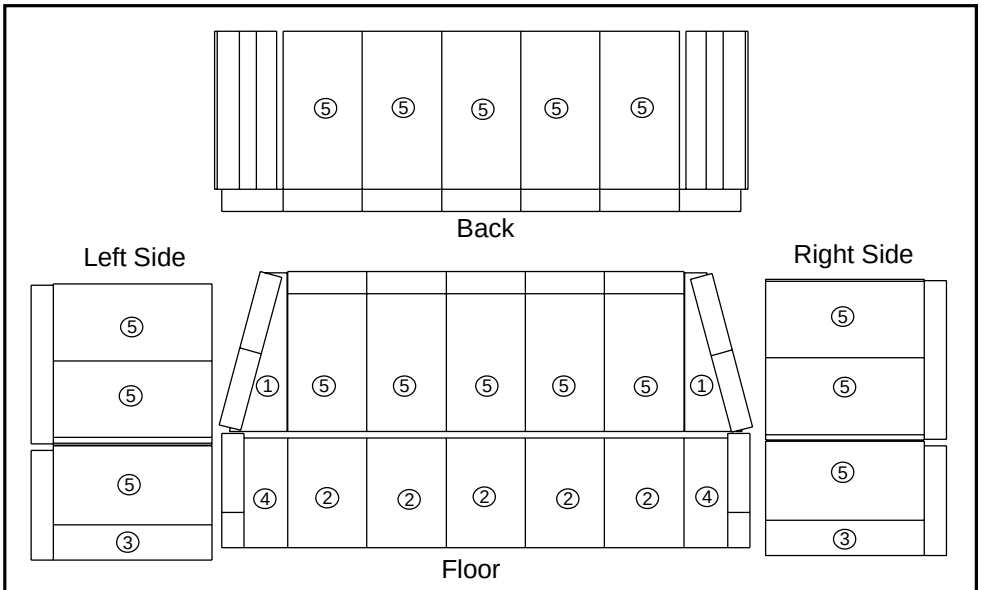
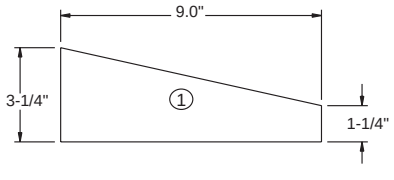


Figure 58.2 Brick Pattern

#	Brick Size	Qty. In Set
1	9” x 3-1/4” x 1-1/4” Angled *(see drawing)*	2
2	6-1/4” x 4-1/2” x 1-1/4”	5
3	9” x 2” x 1-1/4”	2
4	6-1/4” x 3-1/2” x 1-1/4”	2
5	9” x 4.5” x 1-1/4”	16



D. Care and Cleaning of Plated Surfaces

Clean-plated surfaces with vinegar or a glass cleaner before lighting your first fire to prevent permanent staining.

CAUTION

Clean all the fingerprints and oils from the surface before firing the appliance for the first time.

- Use a glass cleaner or vinegar and towel to remove the oils.
- Oils can cause permanent markings on plating, if not removed.
- After plating is cured, oils will not affect the finish.

CAUTION

- Do not use polishes with abrasives.

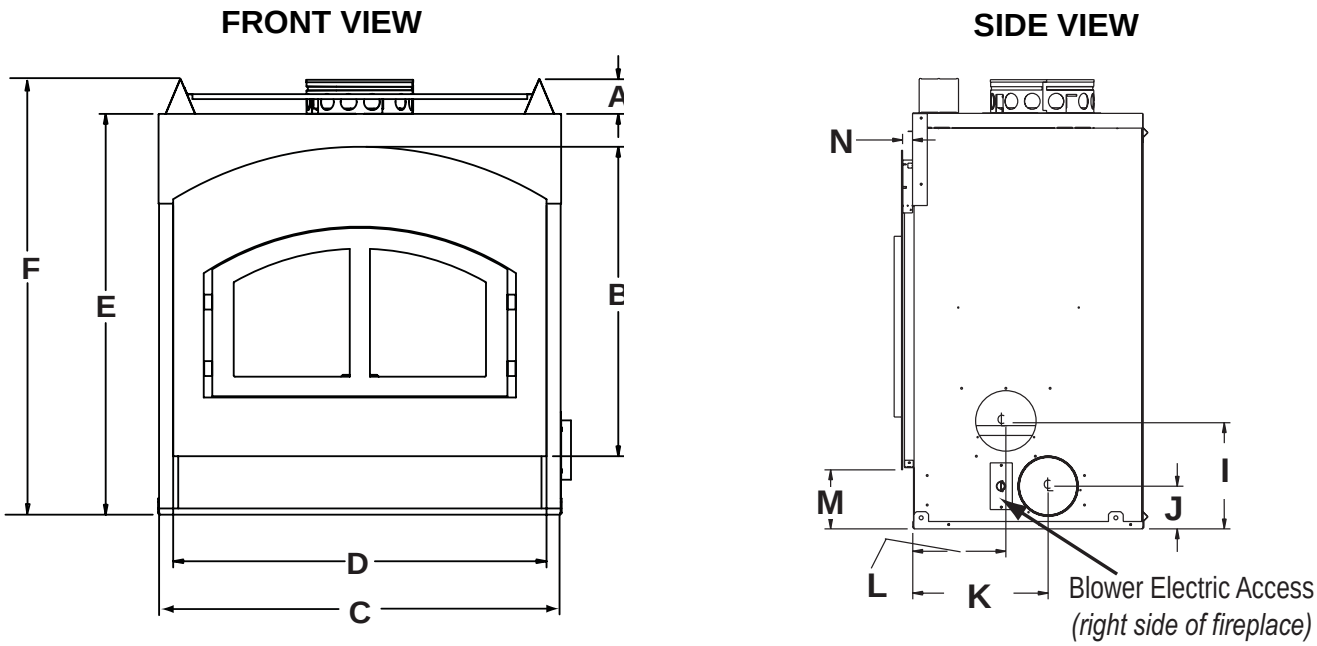
It will scratch plated surfaces.

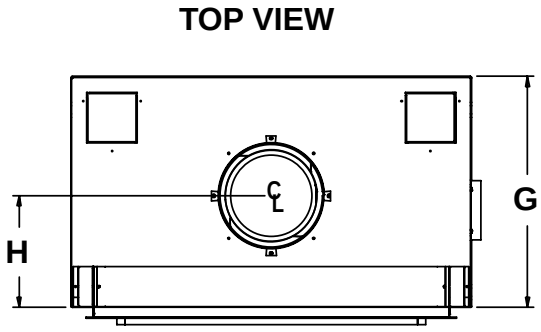
E. Maintenance Task List

Inspect	Maintenance Tasks
Screens	1. Assess condition of screen and replace as necessary.
	2. Verify maintenance of proper clearance to combustible household objects.
Glass Doors	1. Inspect glass panels for cracks. Replace if this condition is present.
	2. Confirm there is no damage to glass or glass frame. Replace as necessary.
	3. Inspect door rope. Confirm glass does not move around in glass frame
	4. Clean glass using a non-abrasive cleaner.
Door Rope (Dollar Bill Test)	1. Open door, place half of dollar bill inside, and close door.
	2. Attempt to pull the bill out.
	3. If the bill gives good resistance or is not removable, the rope is adjusted correctly. If the bill comes out too easily, the door rope needs adjustment to create an even thickness all around door.
Air Intakes	1. Remove any foreign objects.
	2. Verify unobstructed air circulation.
Firebox	1. Inspect condition of brick. Replace if crumbly, deteriorated, or if cracks exceed 1/4 in. (6 mm).
Chimney	1. Inspect for blockage or obstruction such as bird nests, leaves, etc.
	2. Confirm that termination cap remains clear and unobstructed by plants, etc.
	3. Verify that termination cap clearance to subsequent construction (building additions) has been maintained.
	4. Inspect for corrosion or separation.
	5. Verify weather stripping, sealing and flashing remain intact.
	6. Inspect for creosote and remove as needed.

12 Reference Materials

A. Fireplace Dimensions





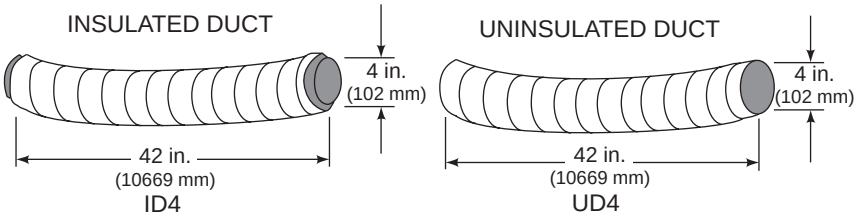
7100FP	A	B	C	D	E	F	G
in	3-1/2	32-1/2	38	40	42-5/16	45-13/16	23-7/16
mm	89	826	965	1016	1075	1148	595
	H	**I**	**J**	**K**	**L**	**M**	**N**
in.	13-3/16	10-13/16	4-5/16	13-3/4	9-7/16	6	1
mm	335	259	109	349	240	152	25

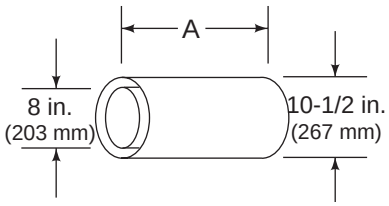
Figure 60.1

B. Chimney Components

The following drawings show the SL-300 Series chimney and fireplace components which may be safely used with this fireplace.

Catalog No.	Description	Catalog No.	Description
CAK4A	Chimney Air Kit	CB876	Chimney Bracket
ID4	Insulated Duct / Outside Air	RF370	Roof Flashing - Flat to 6/12 Pitch
UD4	Uninsulated Duct / Outside Air	RF371	Roof Flashing - 6/12 to 12/12 Pitch
SL306	Chimney Section - 6 in. (152mm) Long	TR344	Round Termination Cap
SL312	Chimney Section - 12 in. (305mm) Long	TR342	Round Telescoping Termination Cap
SL318	Chimney Section - 18 in. (457mm) Long	ST375	Square Termination Cap
SL324	Chimney Section - 24 in. (610mm) Long	TS345	Square Termination Cap
SL336	Chimney Section - 36 in. (914mm) Long	CT35M	Chase Top (Sold in pack of 10)
SL348	Chimney Section - 48 in. (1219mm) Long	12966A	Mobile Home Thimble
SL3	Chimney Stabilizer	MH841	Mobile Home Thimble Extension, 20 in. (508 mm)
SL315	Chimney Offset / Return - 15°	HX4	MICORE Hearth Extension, 20 in. (508 mm) wide
SL330	Chimney Offset / Return - 30°	HEATZONE-WOOD	Heat Zone Kit
FS338	Firestop - Straight	SCR-433	Fire Screen
FS339	Firestop - 15°	TMP-433	Metal Face Template
FS340	Firestop - 30°	TV-TRK	Round Termination Top Vent Kit
AS8	Straight Attic Insulation Shield	9201	Simpson Dura-Plus Base Plate
JB877	Chimney Joint Band		

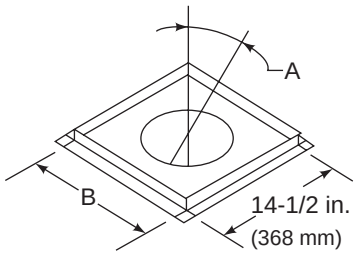




Chimney Sections

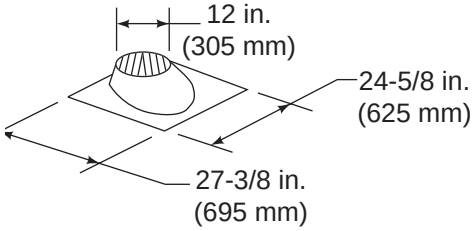
Catalog No.	A	B
SL306	6 in. (152 mm)	4-3/4 in. (121 mm)
SL312	12 in. (305 mm)	10-3/4 in. (273 mm)
SL318	18 in. (457 mm)	16-3/4 in. (425 mm)
SL324	24 in. (610 mm)	22-3/4 in. (578 mm)
SL336	36 in. (914 mm)	34-3/4 in. (883 mm)
SL348	48 in. (1219 mm)	46-3/4 in. (1187 mm)

A = Actual Length
B = Effective length (length of chimney part after it has been snapped to another)

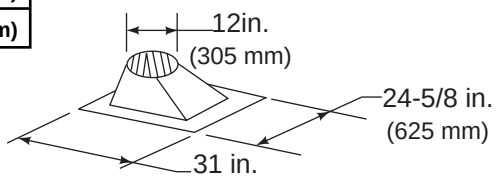


Firestop Spacer

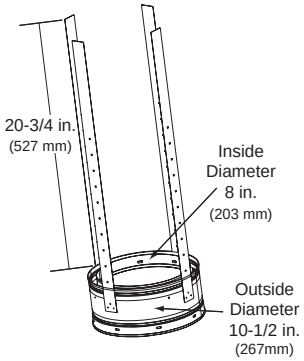
Catalog No.	A	B
FS338	0°	14-1/2" (368 mm)
FS339	15°	18-3/8" (467 mm)
FS340	30°	16-3/4" (425 mm)



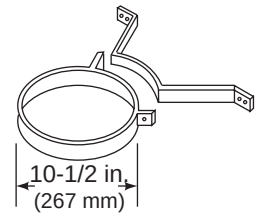
RF370 - Roof Flashing Flat to 6/12 Pitch



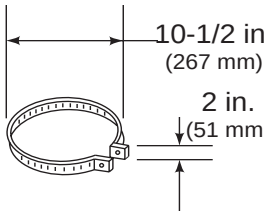
RF371 - Roof Flashing 6/12 to 12/12 Pitch



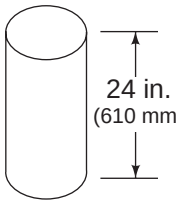
SL3 - Chimney Stabilizer



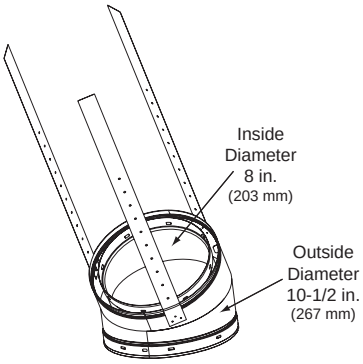
CB876
Chimney Bracket



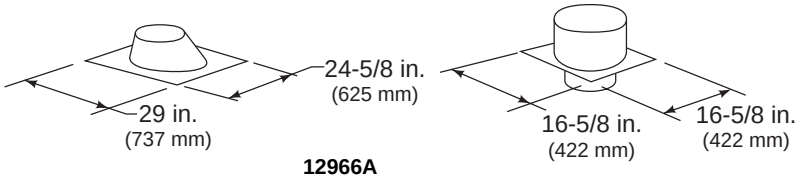
JB877
Joint Band



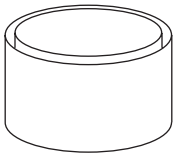
AS8
Straight Attic
Insulation Shield



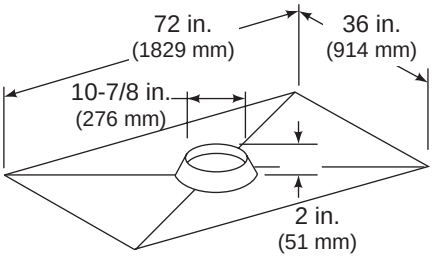
SL315-SL330 - Offset/Return



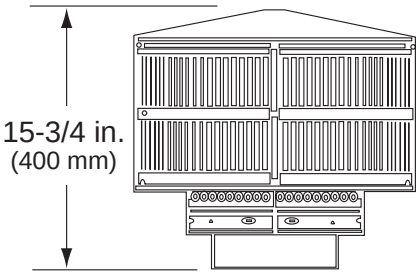
12966A
Mobile Home Thimble



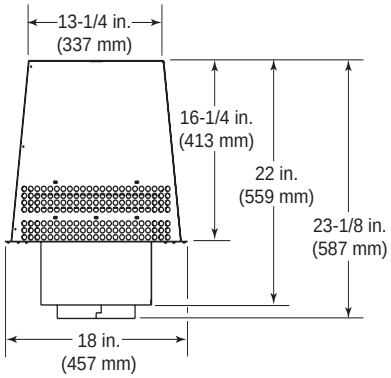
MH841
Mobile Home Thimble
Extension 20 in. (508 mm)



CT35M
Chase Top

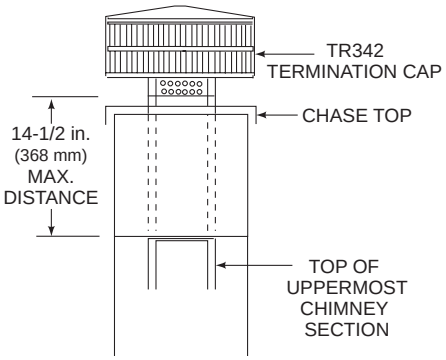


TR344
Round Termination Cap

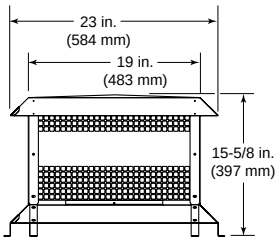


TS345/TS345P
Square Termination Cap

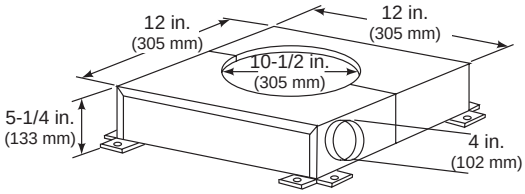
TR-TVK - Round
Termination Top Vent Kit



TR342
Round Telescoping
Termination Cap



ST375
Square Termination Cap



CAK4A
Chimney Air Kit

C. Components Diagrams and Schematics

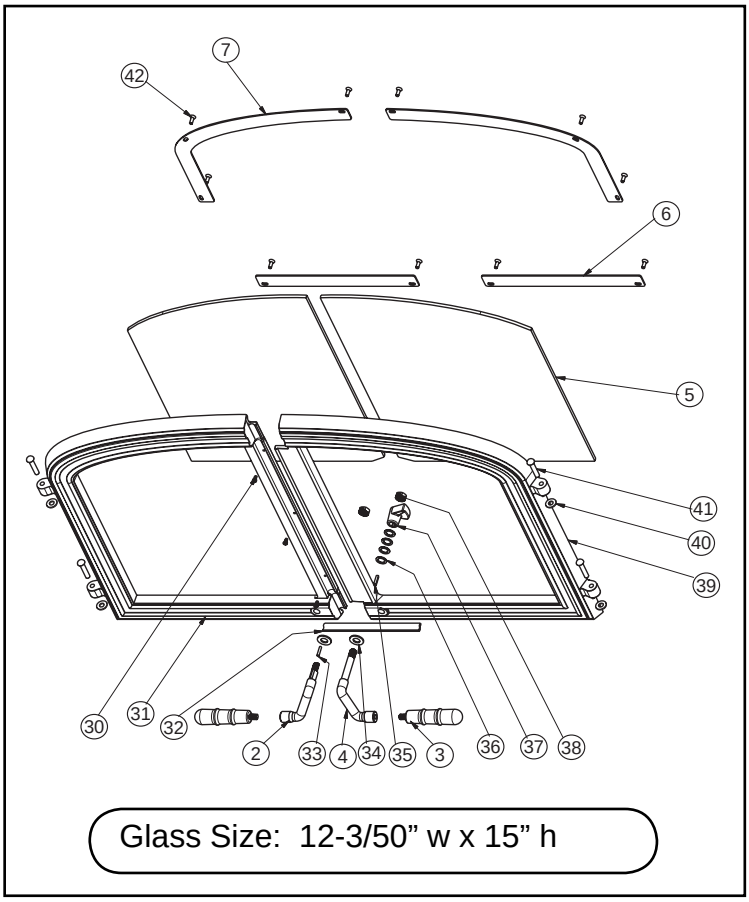


Figure 63.1 - Door, Glass & Door Handle Assembly

Item	Description	SKU
2	Door Handle, Left	433-2030
3	Handle, Fiber	7000-403
4	Door Handle, Right	433-0770
5	Glass Assembly	433-5750
6	Glass Frame, Bottom	433-1620
7	Glass Frame, Top	433-1610
30	Screw, 6-32 x 1/4	available only in assy.
31	Door, Cast, Left	available only in assy.
32	Gasket, 1/8 x 1/2	available only in assy.
33	Set Pin, 1/8 x 5/8	7000-163
34	Washer, 3/8	222-0010
35	Latch Cam Key	430-1151
36	Washer, 5/8 x 0.406	available only in assy.
37	Cam Latch	32084
38	Nut, Lock 3/8-16	available only in assy.
39	Door, Cast, Right	available only in assy.
40	Washer, 1/4	28758
41	Hinge Pin	GD: 229-1240 NL: 229-1250
42	Screw, 8-32 x 1/2	220-0490

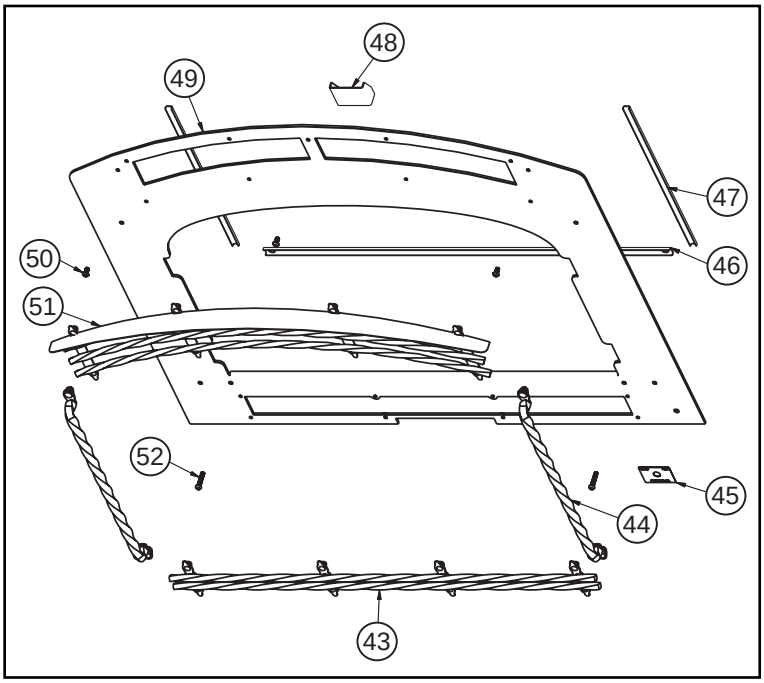
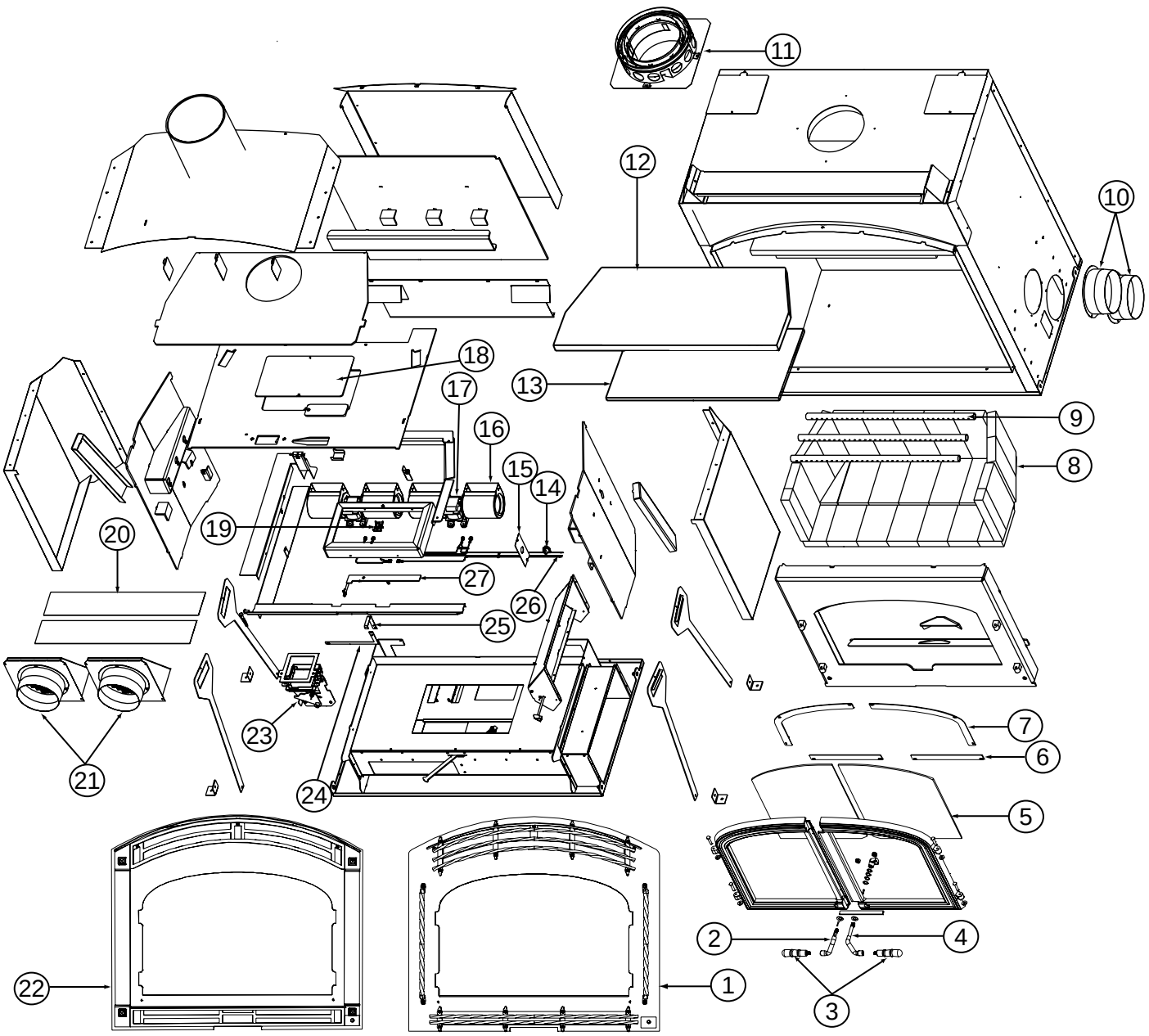


Figure 63.2 - Valley Forge Fascia Assembly

Item	Description	SKU
43	Grille Bar Assembly, Bottom	433-5120
44	Grill Bar Assembly, Side	433-5210
45	Combustion Air Label	available only in assy.
46	Fascia Stiffener	available only in assy.
47	Bracket, Fascia Support	available only in assy.
48	Bracket, Mission Hill Support	available only in assy.
49	Fascia Assembly	available only in assy.
50	Screw, 1/4-20 x 1/2	available only in assy.
51	Grille Bar Assembly, Top	433-5130
52	Screw, 1/4-20 x 1-1/4	available only in assy.

D. Fireplace Diagram



Item #	Description	Item #	Description	Item #	Description
1	Fascia, Valley Forge	10	Unit Collar	19	Snap Disc
2	Door Handle, Left	11	Starter Plate Assembly	20	Hearth Strip
3	Handle, Fiber	12	Blanket, Ceramic	21	Outside Air Kit
4	Door Handle, Right	13	Baffle, Fiberboard	22	Fascia, Mission Hill
5	Glass Assembly	14	Clamp, Cable 3/8-1/2 in.	23	Timer Assembly
6	Glass Frame, Bottom	15	Junction Box Cover Plate	24	Timer Control Arm
7	Glass Frame, Top	16	Blower	25	Timer Arm, Upper
8	Brick, Set	17	Bracket, Blower	26	Wiring Harness
9	Manifold Tube(s)	18	Blower Access Panel	27	Secondary Control Arm

Figure 64.1 - Fireplace Diagram

E. Service Parts

IMPORTANT: THIS IS DATED INFORMATION. The most current information is located on the Quadra-Fire web site at **www.quadrafire.com**. When ordering, supply serial and model numbers to ensure correct part.

Item #	Part Description Alphabetical Order	SKU
13	Baffle, Fiberboard	433-0910
12	Blanket, Ceramic	832-3401
18	Blower Access Panel	433-0450
17	Bracket, Blower	414-0600
	Bracket, Mounting, Snap Disc	410-2521
8	Brick, Set	BRICK-433
	Brick, Single, Uncut, Clay	832-2370
	Brick, Uncut, Set Of 6, Clay	832-3030
	Cam Latch	32084
14	Clamp, Connector, 3/8-1/2	230-1670
	Component Pack (Includes Clamp Connector, 3/8-1/2; Knob; Owner's Manual; EPA Label; Sales Efficiency; Light Switch; Light Switch Cover Plate; Fan Speed Control; Touch-up Paint; and Quadra-Fire Warranty Card.)	433-5180
	Component Pack, Fascia Front (Includes 5/32 Allen Wrench; Fasteners; Instructions; and OAK Knob Label.)	433-5520
2	Door Handle, Left	433-2030
4	Door Handle, Right	433-0770
	Door Trim, Gold, Left	433-7160
	Door Trim, Gold, Right	433-7150
	Door Trim, Nickel, Left	733-7340
	Door Trim, Nickel, Right	433-7330
	Door, Handle, Kit 7100FP	HANDLES-433
	Face Board Assembly	433-5720
	Gasket, Rope, 1/2 in., 10 ft.	834-4170
	Gasket, Rope, 1/4 in., 10 ft.	834-1460
	Gasket, Timer	433-1290
5	Glass Assembly	433-5750
6	Glass Frame, Bottom	433-1620
7	Glass Frame, Top	433-1610
3	Handle Only, Fiber (1)	SRV433-1380
20	Hearth Strip	480-1190
41	Hinge Pin, Gold (order quantity needed)	229-1240
41	Hinge Pin, Nickel (order quantity needed)	229-1250
15	Junction Box Cover Plate	480-1050
	Knob, Air Control	32284
	Knob, Air Shut Off with Set Screw	7000-246
	Knob, Chad, Mission Hill Front	2005-193
	Light Switch	480-1260
	Light Switch Cover Plate	480-1270
	Louver Assembly, Bottom, Valley Forge, Front	433-5120
	Louver Assembly, Top, Valley Forge, Front	433-5130
	Manifold Clip/Screws (4)	832-0661
9	Manifold Tube Set, 7100FP	TUBES-433
9	Manifold, Tube (1)	433-0570

IMPORTANT: THIS IS DATED INFORMATION. The most current information is located on the Quadra-Fire web site at **www.quadrafire.com**. When ordering, supply serial and model numbers to ensure correct part.

Item #	Part Description Alphabetical Order	SKU
	Outer Can Cover Plate	480-1300
	Outer Can Lower Flange	433-0970
	Outside Air Hood, 6 in.	480-5170
	Outside Air Termination Cap, 6 in.	480-1160
	Paint, Touch-up, Matte Black	7000-304
	Rivnut Repair Kit 1/4-20	RIVNUT-REPAIR
	Screw, BH, 1/4-20, Fascia, Pkg. Of 24	225-0630/24
	Side Bar Assembly, Valley Forge, Front	433-5210
19	Snap Disc	480-1730
	Speed Control, (Blower)	7000-143
25	Timer Arm Upper	433-1550
23	Timer Assembly	SRV433-5080
24	Timer Control Arm	433-0950
	Timer Replacement Assembly (Timer Only)	SRV480-1940
10	Unit Collar	659-125
26	Wire Harness	SRV480-0990

F. Accessories

Item #	Part Description Alphabetical Order	SKU
16	Blower	812-4900
	Chimney Air Kit	CAK4A
	Door Assembly, Black	433-5580
	Door Assembly, Gold	433-5590
	Door Assembly, Nickel	433-5600
22	Fascia, Mission Hill	DF-7100MH-B
1	Fascia, Valley Forge	DF-7100VF-B
	Firescreen, 7100FP	SCR-433
	Heat Zone Kit	HEAT-ZONE-WOOD
	Lintel Bar	LINTEL-433
21	Outside Air Kit	480-5170
11	Starter Plate Assembly	SL1
	Template, 7100	TMP-433
	Termination Cap, Outside Air, with Door	832-3620
	TR Top Vent Kit	TR-TVK

G. Warranty Policy

LIMITED LIFETIME WARRANTY
The Hearth & Home Technologies limited Lifetime Warranty guarantees that the following components will work as designed for the lifetime of the stove or Hearth & Home Technologies will repair or replace them. These items include but are not limited to steel and cast iron components, all gas burners, gas logs, combustion chambers, heat exchanger systems, stainless steel firebox components, plating, doors, glass damaged by thermal breakage, steel baffle supports, steel and ceramic baffles and manifold tubes. Labor is for the first five years.

THREE YEAR WARRANTY
Our pellet firepots are covered under Hearth & Home Technologies three-year warranty program. Labor is for 3 years.

TWO YEAR WARRANTY
All electrical components such as but not limited to blowers, wiring, vacuum switches, speed controls, control boxes, thermodisc switches, pilot assembly, gas valves, thermostats and remotes are covered under Hearth & Home Technologies two-year warranty program. Effective April, 2005 igniters are also covered under the two year warranty. Labor is for two years.

ONE YEAR WARRANTY
Porcelain and Powder Coat finishes are warranted against manufacturer defects for one year. Labor to repair or replace these parts is covered for one year, reimbursed per our warranty service fee schedule.

CONDITIONS
This warranty is non-transferable and is made to the original retail purchaser only provided that the purchase was made through an authorized dealer of Hearth & Home Technologies. It must be installed and operated at all times in accordance with the Installation and Operating Instructions furnished with this product, as well as any applicable local and national codes. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.

Labor to repair or replace items covered under the limited Lifetime Warranty will be covered for the first five years per our warranty service fee reimbursement schedule. Parts covered under the limited Lifetime Warranty will be covered for the lifetime of the appliance up to a maximum of ten (10) years after Hearth & Home Technologies discontinues the model and two (2) years for optional accessories. Adjustments, regular maintenance, cleaning and temporary repairs do not qualify for a service call fee and will not be covered. The replacement of consumer replaceable items and installation of upgraded component parts do not quality for a service call fee, and will not be covered.

This limited Lifetime Warranty does not extend to or include surface finish on the appliance, door gasketing, glass gasketing, glass, firebrick, pellet logs, kaowool or other ceramic insulating materials. It does not cover installation or operational-related problems such as overfiring, use of corrosive driftwood, downdrafts or spillage caused by environmental conditions, nearby trees, buildings, hilltops, mountains, inadequate venting or ventilation, excessive offsets, or negative air pressures caused by mechanical systems such as furnaces, fans, clothes dryers, etc.

Any installation, construction, transportation, or other related costs or expenses arising from defective part(s), repair, replacement, etc., will not be covered by this warranty, nor will Hearth & Home Technologies assume responsibility for them. Further, Hearth & Home Technologies will not be responsible for any incidental, indirect, or consequential damages, except as results in damage to the interior or exterior of the building in which this appliance is installed. This limited Lifetime Warranty does not apply to the venting components, hearth components or other accessories used in conjunction with the installation of this product not manufactured by Hearth & Home Technologies

This warranty is void if the stove has been overfired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals, the stove is subjected to prolonged periods of dampness or condensation, or there is any damage to the stove or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation. Hearth & Home Technologies may, at its discretion, fully discharge all obligations with respect to this warranty by either repairing or replacing the unit, or refunding the wholesale price of the defective part(s).

This limited Lifetime Warranty is effective on all appliances sold after May 1, 2002 and supersedes any and all warranties currently in existence.

Policy 250-8620 Rev K

H. Contact Information

QUADRA-FIRE®

***CONTACT INFORMATION*:**

Hearth & Home Technologies
1445 North Highway
Colville, WA 99114
Division of HNI INDUSTRIES

Please contact your Quadra-Fire dealer with any questions or concerns.
For the number of your nearest Quadra-Fire dealer,
visit our web site at www.quadrafire.com

CAUTION

Do NOT discard this manual.

- Important operating and maintenance instructions included.

- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

Your Records for Model:

7100FP EPA Certified
Woodburning Fireplace

DEALERSHIP WHERE PURCHASED:

SERIAL NUMBER: _____ _____

DATE PURCHASED: _____ _____

DATE INSTALLED: _____ _____

DEALER TELEPHONE: _____

This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

HEARTH & HOME technologies